

U.S. DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON

JACOB BEATY and JESSICA BEATY on
behalf of themselves and all others similarly
situated,

Plaintiffs,

vs.

FORD MOTOR COMPANY,

Defendant.

NO.

CLASS ACTION COMPLAINT

JURY TRIAL DEMAND

I. INTRODUCTION

Plaintiffs Jacob Beaty and Jessica Beaty (collectively “Plaintiffs”), on behalf of themselves and all others similarly situated, allege the following against Defendant Ford Motor Company including its Lincoln Motor Company and Mercury divisions (collectively “Ford”). Plaintiffs’ allegations are based upon personal knowledge as to their own acts and experiences in this matter, the investigation of counsel, and upon information and belief as to all other matters.

II. SUMMARY OF CASE

1. Historically, automobile sunroofs have been modestly sized, spanning just a small portion of the roof over the driver and front passenger seats.

2. Starting in the mid-2000s, automobile manufacturers expanded sunroofs in size so that now these sunroofs (i.e., sheet(s) of glass) account for nearly the entire roof of the vehicle. These expanded sunroofs are often referred to as “panoramic.”¹

3. While panoramic sunroofs are aesthetically pleasing, and thus command a premium price, they also pose new and significant engineering challenges. Replacing metal roofs and small glass sunroofs with large plates of glass requires precision in the strengthening, attachment, and stabilization of the glass.

4. Like other manufacturers, Ford has failed to meet these engineering challenges, as is evidenced by its own panoramic sunroofs’ propensity to spontaneously shatter (referred to herein as “the Defect”). Unlike several manufacturers that have issued safety recalls, Ford has not recalled its defective panoramic sunroofs.

5. The shattering events are so powerful that startled drivers compare it to the sound of a gunshot, after which glass fragments often rain down upon the occupants of the vehicle, sometimes while driving at highway speeds.

6. For Ford vehicles, at least 99 owners of vehicles with defective sunroofs have reported to the National Highway Traffic and Safety Administration (“NHTSA”) that their sunroofs have spontaneously exploded or shattered. A sampling of these consumer complaints is attached in Exhibit 1 (these consumer complaints were accessed at <http://www-odi.nhtsa.dot.gov/owners/SearchSafetyIssues> on March 15, 2017).

7. Ford knew or should have known about the Defect since at least 2008 when three or more NHTSA complaints were filed regarding the Defect in the Ford Edge. *See* Exhibit 1.

8. On or before May 12, 2014, Ford knew or should have known about the Defect because NHTSA opened an investigation of Kia Motor Company vehicles whose panoramic

¹ Ford calls the enlarged sunroofs Panoramic Sunroofs, Panoramic Vista Roofs, Dual Panel Moonroofs, or Power Moonroofs depending upon the vehicle model. For consistency, all will be referred to collectively as the Ford “panoramic sunroofs” or “defective sunroofs.”

sunroofs were exhibiting the same defect (<https://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM455160/INOA-EA14002-1938.PDF>, accessed on March 15, 2017). Ford certainly knew about the Defect by the time NHTSA formally included Ford in this investigation on or about July 25, 2014. *See* Exhibit 2 (Letter from Scott Yon, Office of Defects Investigation Chief, to Steven Kenner, Global Director of the Ford Motor Company Automotive Safety Office (July 25, 2014), available at <https://static.nhtsa.gov/odi/inv/2014/INIM-EA14002-63587.pdf> (accessed on March 15, 2017)).

9. On April 14, 2016, NHTSA expanded its investigation inquiries as to Ford and other manufacturers regarding the Defect. *See* Exhibit 3 (Nat'l Highway Traffic Safety Admin., *EA12-002: General Order Directed to Motor Vehicle Manufactures* (April 14, 2016), available at <http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM514031/INLM-EA14002-63477.pdf> (accessed on March 15, 2017)). Ford's responses are not yet available on the NHTSA website. The investigation remains open.

10. Despite knowing of the Defect, Ford refuses to warn drivers of the danger and continues to sell and lease the vehicles with defective panoramic sunroofs without disclosing the Defect to consumers.

11. Plaintiffs seek relief for themselves and a class of all other consumers who purchased or leased Ford vehicles with panoramic sunroofs, or in the alternative all Washington consumers, to redress the harm they suffered as a result of the Defect. Plaintiffs request an award of damages and appropriate equitable relief, including an order enjoining Ford from continuing to sell vehicles with the Defect and requiring Ford to adequately disclose the Defect to current Ford owners and repair their vehicles.

III. PARTIES

12. Jacob Beaty and his spouse, Jessica Beaty, are residents of Lacey in Thurston County, Washington.

1 2007-present, Ford Flex 2009-2016, Ford Focus 2009-2016, Ford Fusion 2010-present, Ford
 2 Explorer 2011-2016, Ford F 150 2011-2016, Ford Mustang 2009-2014, Ford Escape 2008-
 3 2016, Ford Transit Connect 2014-2106, Ford C-Max 2013-2016, Lincoln MKX 2007-2016,
 4 Lincoln MKS 2009-2015, Lincoln MKZ 2013-2016, Lincoln MKT 2010-2016, Mercury Milan
 5 2010-2011, and Mercury Montego 2010-2011 with factory-installed panoramic sunroofs
 6 (collectively “Class Vehicles”). Plaintiffs anticipate amending the definition of the Class
 7 Vehicles when Ford identifies in discovery all of the vehicles it manufactured and sold with the
 8 optional panoramic sunroof.

9 19. Owners and lessees of Class Vehicles are referred to as “Class Members” or
 10 “the Class.”

11 20. Starting in at least the 2007 model year, Ford introduced vehicles with an
 12 optional upgrade of a factory-installed panoramic sunroof. The panoramic sunroof designs in
 13 all of the Class Vehicles are substantially similar in design and manufacture.

14 21. Ford generally markets the panoramic sunroofs as a luxury upgrade, available
 15 even in its lower-end cars like the Ford Focus or C-Max. The cost to upgrade the sunroof,
 16 depending upon the vehicle model, ranges from over one thousand to several thousand dollars.
 17 The actual material cost of the panoramic sunroofs is relatively low, making the option one of
 18 the most profitable features in the automotive industry. A sample advertisement for the
 19 panoramic sunroof in the 2008 Ford Edge is reproduced below:

**THE VISTA ROOF
GIVES EVERYBODY
A WINDOW SEAT.
THE 2008 EDGE.**



Three times larger than a traditional moonroof, the available Vista Roof™ allows you to have a good view no matter what seat you're in. Learn more at FORDVEHICLES.COM.



22. The Ford brochure for the Beaty Plaintiffs' 2013 Ford Escape Titanium describes its "Power panoramic Vista Roof®" as a technological advancement:

Takes tech to new heights.



The all-new Escape offers many of our latest advancements. For entertaining, there's the full-bodied sound of the 10-speaker 300-watt Audio System from Sony®. Push-button start works with the Intelligent Access key fob tucked away in your pocket or purse. Standard MyKey® enables parents of young drivers to block calls and reduce audio volume while driving. Up top, a fabric mesh deflector on the panoramic Vista Roof® helps provide quieter performance along with fresh air.

Audio System from Sony®
Class-exclusive MyKey®
110-volt power outlet†
Intelligent Access with push-button start†
Power panoramic Vista Roof®

Available features.

2013 ALL-NEW ESCAPE
ford.ca



(http://www.auto-brochures.com/makes/Ford/Escape/Ford_US%20Escape_2013.pdf, accessed on March 15, 2017.)

23. Panoramic sunroofs are made of tempered or laminated glass that attaches to tracks, which in turn are set within a frame attached to the vehicle. Most panoramic sunroofs, including those offered by Ford, are fit with a retractable sunshade. Examples of panoramic sunroofs appear in the photographs below.

2012 Lincoln MKX



2008 Ford Edge



2011 Ford Explorer



2013 Ford Escape



24. Panoramic sunroofs present manufacturing, design, and safety challenges for manufacturers because the large plates of glass take up much of the surface area of the vehicle's roof.

1 25. One particular challenge is the material make-up of the glass. Whereas some
2 manufacturers, such as Volvo and Honda, have used *laminated* glass, other manufacturers, such
3 as Ford, Nissan, Kia, Hyundai, and Volkswagen, have opted to install panoramic sunroofs with
4 *tempered* glass that feature large areas of ceramic paint.

5 26. In the automotive industry, tempered or toughened glass is generally made in the
6 same manner by all manufacturers: a piece of annealed glass is shaped and cut as to original
7 equipment manufacturing (“OEM”) standards. The glass is heated and then rapidly cooled, i.e.,
8 tempered. The tempering process creates an outer layer of glass that is compressed (similar to
9 being shrink-wrapped) around a middle core of the glass that is constantly pressing outwards,
10 creating tension or tensile force. The compressive and tensile layers create a stronger piece of
11 glass as compared to non-tempered glazing. However, if the compressive layer is
12 compromised, then the entire piece of glass fails catastrophically and often explosively.

13 27. Problems with panoramic sunroofs are compounded by the use of thinner glass.
14 Car makers use thinner glass in panoramic sunroofs to save weight and improve vehicle fuel
15 efficiency. Thinner glass, however, is very difficult to temper properly (especially when
16 thicknesses are 4 mm or less) as the compressive layers are thinner, increasing the probability
17 of catastrophic failure.

18 28. Additionally, the tempered glass used in the Class Vehicles features a ceramic
19 paint applied prior to tempering. Automotive ceramic paint or ceramic enamels is composed of
20 fine powders of low melting point glass frit, pigments, and other additive oxides, sulfides, or
21 metals. After application of the ceramic enamel, the glass is then tempered, as described above.
22 These ceramic enamels are applied on the top around the edges of panoramic sunroof glazing
23 and serve aesthetic and functional purposes. The ceramic paint area appears as a “black band”
24 along the edge of the glass.

25 29. Ceramic enamels are known “adulterants” and significantly weaken the
26 structural strength and integrity of the Class Vehicles’ tempered panoramic sunroof glazing.
27

1 Among other factors, ceramic enamels compromise glass strength because: (1) the enamels
2 have different thermal expansion coefficients than the glass substrates (the glass and the paint
3 expand at different rates), resulting in residual stress between the ceramic enamel and the glass
4 substrate; and (2) the glass frit will ion exchange with the glass substrate lessening or
5 eliminating the compressive layer above the tensile region thereby significantly weakening it.

6 30. The ceramic paint area is relatively small in conventional sunroofs, but ceramic
7 paint areas have become larger with the advent of panoramic sunroofs, resulting in the glass
8 becoming progressively weaker, more likely to spontaneously burst and, for the unsuspecting
9 driver and passengers, more dangerous.

10 31. In 2013, the Korea Automobile Testing & Research Institute (“KATRI”)
11 concluded that the enamel used for ceramic paint areas in panoramic sunroofs like those
12 installed in Ford vehicles impairs the strength of the glass, making it not only less durable than
13 the usual toughened glass, but also less durable than ordinary glass. For an example of these
14 findings, see Lee Kwang-bum, et al., *A Study On Toughened Glass Used For Vehicles And Its*
15 *Testing Methods*, No. 15-0152 available at [https://www-esv.nhtsa.dot.gov/Proceedings/](https://www-esv.nhtsa.dot.gov/Proceedings/24/files/24ESV-000152.PDF)
16 [24/files/24ESV-000152.PDF](https://www-esv.nhtsa.dot.gov/Proceedings/24/files/24ESV-000152.PDF) (accessed on March 15, 2015).

17 32. Following KATRI’s report, an Informal Working Group on Panoramic Sunroof
18 Glazing was established by the United Nations Economic Commission for Europe to evaluate
19 the safety of panoramic sunroofs. The Working Group is chaired by a representative from
20 KATRI and is considering whether to amend the UN regulations on safety glazing. At the end
21 of June 2016, the Working Group confirmed that conventional automotive glass enamels
22 weaken the mechanical strength of panoramic sunroof glazing. This working group’s findings
23 and regulatory recommendations are available at <https://globalautoregs.com/groups/93>.

24 33. Another challenge presented by the panoramic sunroofs is the need to ensure the
25 sunroof glass is fastened to the vehicle with a sufficient degree of tightness. Ford and other
26 manufacturers fasten the sunroof in a manner that reduces road and wind noise, and makes
27

1 them less susceptible to rainwater incursion. At the same time, flexing and vibration caused by
 2 ordinary driving imposes stress on the sunroof, ultimately causing the glass to shatter. In the
 3 Ford models at issue, the compromised tempered glass cannot withstand the pressures and
 4 flexing that the sunroof frame and vehicle demand, even when the vehicle is brand new or is
 5 parked and sitting still.

6 **B. Consumer Complaints Reveal the Magnitude and Seriousness of the Defect**

7 34. Below are just a few examples of the numerous complaints regarding Ford
 8 sunroofs lodged with NHTSA. (*See also* Exhibit 1.) Few, if any, of the drivers who filed
 9 reports with the federal government reported that their panoramic sunroof shattered because of
 10 an object striking their vehicle. In contrast, many of the drivers report that their panoramic
 11 sunroofs spontaneously shattered while the vehicle was in motion. The complaints are
 12 viewable online at <https://www-odi.nhtsa.dot.gov/owners/SearchSafetyIssues> (accessed on
 13 March 15, 2017).

14 2008 Ford Edge: Enclosed are a description and the other
 15 information about the Ford Edge you requested. This is part of
 16 what was sent to the Ford Motor Company after the sunroof
 17 claim was denied on the basis that they feel something from the
 18 outside hit the sunroof. On July 24, 2008 at about 8:00 pm, my
 19 brother in laws was driving my car on Interstate 75 just north of
 20 Bowling Green, Ohio. He was driving 60-65 mph with the
 21 windows up, the air conditioner on, and the sunroof closed. As he
 22 was driving, he reports a sudden explosion in the car, like he was
 23 shot. He and the passenger had small shards of broken glass rain
 24 down on them. They managed to safely pull the car to the brim of
 25 the highway without any further problems. Upon examining the
 26 sunroof, they observed a hole the size of a small dinner plate in
 27 the center of the roof and all four corners missing. The glass in
 the middle and corners of the sunroof had the appearance ?like a
 volcano? out of the car. Both the driver and the passenger
 reported that there were no overpasses or cars around them to
 kick up any object that could have hit the roof. The glass from the
 hole was not in the car. I feel this claim has been denied unjustly
 and that the Ford Motor Company and Planet Ford of Centerville
 are closing their eyes to an issue that should be investigated
 thoroughly by someone in person instead of sending ?digital
 pictures? to someone at corporate to make a decision. After all,

1 this is a safety issue that could have been fatal, leaving Ford with
2 a much bigger problem than just replacing a faulty sunroof.
Sincerely, 2008 Ford Edge Limited*TR.

3 (NHTSA ID: 10237272 – Date Complaint Filed 08/06/2008)

4 2013 Ford Edge. The panoramic sunroof exploded and shattered.
5 This was not due to any impact or collision of any type, to
6 include debris, flying pebbles, etc. The sunroof exploded
7 outwards, with the glass pushed upwards. Additionally, the glass
8 was shattered in all four corners. This is a design defect, with
9 documented recalls against many makes/models. This exact
10 situation has happened to hundreds of other people/vehicles
whether driving at highway speeds or parked. In every case, the
scenario appears to be the same: the tempered glass exploded
due to design failures while operating the vehicle under
normal/routine conditions. Recall requested.

11 (NHTSA ID: 10863812 – Date Complaint Filed 05/08/2016)

12 2014 Ford Flex. My wife and I were driving on a 2-lane highway
13 in our vehicle at the approximate speed of 55 mph. Our Ford Flex
14 was equipped with a factory sunroof, which was in the closed
15 position, and the sunshade was open. As we were traveling down
16 this road, with no traffic coming in the opposite direction, or in
17 front of us, we heard a shotgun sound come from above our
18 heads and glass flew everywhere in our vehicle, including the
19 back where our 5-year old daughter was sitting. Our sunroof
20 literally exploded!!!! We closed the sunshade and immediately
21 traveled to our local dealer where we purchased the vehicle. My
22 think at first was that something hit the glass, but yet nothing was
23 around us that could have thrown anything onto the glass to break
24 it. When we arrived at the dealership, we exited the car and when
25 I looked at the huge hole in the sunroof, all of the glass
26 surrounding the hole was pointing upwards as if the glass had
27 literally exploded upward, not down into the car. I have never
heard of anything like this happening, and luckily my wife was
under control enough when it happened that she didn't swerve off
the road. After the dealership submitted details of this incident to
Ford, they rejected to do anything to take care of this repair for
us. I have since had to file a claim with my insurance to get it
fixed, and have been contacting Ford executives on a daily basis,
and contacting media sources, to get attention to this safety issue.
I have found several other cases that stretch back to as far back as
2008 so far, with a description almost identical to ours. This is a
safety issue that needs to have attention brought to before
somebody gets seriously hurt or dies. *TR

(NHTSA ID: 10606988 – Date Complaint Filed 06/30/2014)

2016 Ford Explorer. The rear sunroof exploded, I was driving down Tollway 99 out side of Houston Texas, at about 60 mph. The roadway is flat and straight the 4+ lanes are 150 yards apart, no overpasses. There were no other cars or trucks within 100 yards or more. And a very loud noise, like a gun shot “blew out” the rear glass (the front does not move, the rear cannot) in the sunroof. I only have about 8000 mile on the SUV. Ford does not seem to understand the problem and keeps saying it must have been a rock. I can’t prove they are wrong and they can’t prove that I am correct. So my insurance pays, which means we all lose.

(NHTSA ID: 10870814 – Date Complaint Filed 05/25/2016)

2013 Ford F-150. In April 2014 our sunroof exploded as we were driving on the highway. We took it to the Ford dealership where we purchased the truck and they said they had never heard of a sunroof exploding for no reason. After further research it looks like this has happened to other people. Ford took no responsibility and charged us \$1035.05 to replace the sunroof. Scared us to death when the sunroof exploded. Thankfully no one was hurt.

(NHTSA ID: 10818459 – Date Complaint Filed 01/06/2016)

2014 Ford Escape. My wife and I were driving on a 4 lane highway during the day. We were not operating the panoramic sunroof and the shade was completely open. Suddenly and all at once, the front pane of glass in the sunroof exploded into the cabin. Glass cut my face in two locations and caused bleeding. There was no nearby traffic in front of us or on the side. We were not traveling under an overpass. We were able to quickly regain control of the vehicle as the breakage caused us to slow down and swerve. There were no other collisions or damage after the sunroof broke. As no object or projectile caused the breakage and there was no prior damage to the sunroof, it is obvious that there was fault with either the glass or sunroof assembly.

(NHTSA ID: 10671793 – Date Complaint Filed 01/12/2015)

2009 Lincoln MKZ. No extraneous variables leading to the rear window explosion. The police were not able to find any contact entry or evidence of vandalism and indicated it was possibly defective glass. Dealership indicated that they would not investigate the possibility of previous stress cracks or design defects, although they admitted that this class of vehicle has severe internal pressure fluctuations while a rear passenger

1 window is open traveling at highway speeds, and this was
 2 experienced the day before. The glass shattered while the car was
 3 parked, with the temperature being between 65 & 70F, with
 4 nobody in it. There were no prior issues with the glass. The only
 issue with the vehicle prior to the glass was the pressure
 fluctuations.

5 (NHTSA ID: 10401537 – Date Complaint Filed 05/18/2011)

6 2010 Lincoln MKS. While driving the moon-roof exploded from
 7 the inside of the vehicle out. The noise was very loud, shot gun
 type noise, tire blow out, etc.

8 (NHTSA ID: 10761909 – Date Complaint Filed 09/03/2015)

9 2013 Lincoln MKT. The panoramic roofs on the Lincoln MKT
 10 blow out for no reason. We have 14 MKTs in our fleet we have
 11 had close to 10 of the glass roofs shatter. We are very concerned
 12 that glass could into a drivers eyes as well as our passengers.
 13 Also when they do blow out a good size chunk of the roof blows
 14 out and anyone behind us could be in grave danger especially
 15 someone on a motorcycle. The design of these roofs is flawed
 and either these roofs should not be allowed or they should be
 design with a type of glass or plastic product that won't shatter.
 Lincoln helped us in some of the incidences with the cost are now
 telling us a definitive no! Cost to replace a glass roof runs about
 \$1500.

16 (NHTSA ID: 10759218 – Date Complaint Filed 10/07/2015)

17 2015 Lincoln MKT. We are a limousine service while driving
 18 down the highway, the glass roof exploded for no reason, no
 other vehicle were around.

19 (NHTSA ID: 10824752 – Date Complaint Filed 02/08/2016)

20 **C. Ford's Knowledge of the Defect**

21 35. A survey of driver complaints shows that Ford sunroofs often shatter within
 22 weeks or months of purchase, and NHTSA was informed of this problem in Ford vehicles as
 23 early as 2008. *See* Exhibit 1.

24 36. Like other automobile manufacturers, Ford monitors NHTSA for information on
 25 emerging problems with its vehicles.

1 37. In 2011, a Wards Auto piece noted that the popularity and demand for Ford's
 2 panoramic Vista sunroofs was increasing and exceeding Ford's expectations. The article
 3 discussed Ford's plans to offer the option on more vehicles. *See* Bryan Pope, *Panoramic*
 4 *Popularity Catches Ford Off-Guard*, Wards Auto (August 11, 2011), [http://wardsauto.com/](http://wardsauto.com/news-analysis/panoramic-popularity-catches-ford-guard)
 5 [news-analysis/panoramic-popularity-catches-ford-guard](http://wardsauto.com/news-analysis/panoramic-popularity-catches-ford-guard) (accessed on March 15, 2017).

6 38. In 2012, The Wall Street Journal reported on the popularity of panoramic
 7 sunroofs among the many vehicle manufacturers who offered it and noted safety concerns over
 8 rollover strength and reports of glass spontaneously shattering. *See* Neil Parmar, *Supersizing*
 9 *the Sunroof, Even in Economy Cars*, Wall St. J. (December 11, 2012), [http://www.wsj.com/](http://www.wsj.com/articles/SB10001424127887324024004578173271481039256)
 10 [articles/SB10001424127887324024004578173271481039256](http://www.wsj.com/articles/SB10001424127887324024004578173271481039256) (accessed on March 15, 2017).

11 39. On or before May 14, 2014, NHTSA opened an investigation of the panoramic
 12 sunroof failures, which initially focused on 2011-2013 Kia Sorento panoramic sunroofs. *See*
 13 Nat'l Highway Traffic and Safety Admin., U.S. Dep't of Transp., Office of Defects
 14 Investigation: No. EA 14-002 (Opened: 05/12/2014), [https://www-odi.nhtsa.dot.gov/owners/](https://www-odi.nhtsa.dot.gov/owners/SearchResults;jsessionid=1TZpY0HQcwJvFCWzP6l6GkpnLFsLJbB0Qv4TY1TTLLjYyCX3WbP1052099763)
 15 [SearchResults;jsessionid=1TZpY0HQcwJvFCWzP6l6GkpnLFsLJbB0Qv4TY1TTLLjYyCX3](https://www-odi.nhtsa.dot.gov/owners/SearchResults;jsessionid=1TZpY0HQcwJvFCWzP6l6GkpnLFsLJbB0Qv4TY1TTLLjYyCX3WbP1052099763)
 16 [WbP1052099763](https://www-odi.nhtsa.dot.gov/owners/SearchResults;jsessionid=1TZpY0HQcwJvFCWzP6l6GkpnLFsLJbB0Qv4TY1TTLLjYyCX3WbP1052099763) (accessed on March 15, 2017). The investigation was soon expanded to other
 17 vehicle manufacturers, including Ford.

18 40. On July 25, 2014, NHTSA sent a letter to Ford requesting information about its
 19 vehicles with panoramic sunroofs, including the model years 2011-2014 Ford Explorer, Edge,
 20 and Escape vehicles (referred to in the NHSTA investigation as "Peer Vehicles"). The
 21 information requests from NHTSA included, among other items: Ford's sales numbers for Peer
 22 Vehicles, identification of the model and supplier of the panoramic sunroofs for the Peer
 23 Vehicles, and identification of all complaints received by Ford regarding shattering sunroofs in
 24 the Peer Vehicles. *See* Exhibit 2 (Letter from Scott Yon, Office of Defects Investigation Chief,
 25 to Steven Kenner, Global Director of the Ford Motor Company Automotive Safety Office (July
 26
 27

25, 2014), also available at <http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM516188/INIM-EA14002-63587.pdf> (accessed on March 15, 2017)).

41. According to Ford's NHTSA responses (dated August 22, 2014 and amended on September 2, 2014), approximately 563,000 Peer Vehicles were sold in the United States and U.S. protectorates and territories, as shown in the chart below (note: as Ford explained in its response, the Ford Escape had no panoramic sunroof option until model year 2013):

Model	2011 MY	2012 MY	2013 MY	2014 MY
<i>Ford Explorer</i>	34,833	31,826	80,063	73,353
<i>Ford Edge</i>	58,635	31,534	83,502	15,052
<i>Ford Escape</i>	N/A	N/A	91,910	62,241

(<http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM466295/INRL-EA14002-59971P.pdf> and <http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM466296/INRL-EA14002-60016P.pdf>, accessed on March 15, 2017).

42. In those same responses, Ford identified suppliers of panoramic sunroofs in the Peer Vehicles as follows:

a. The 2011-2014 Ford Explorer front and rear glass panel is supplied by Inalfa Roof Systems and is called Dual Panel Moonroof;

b. The 2011-2014 Ford Edge front and rear glass panel is supplied by Webasto Roof Systems and is called Panoramic Vista Roof; and

c. The 2013-2014 Ford Escape front and rear glass panel is supplied by Inalfa Roof Systems and is called Panoramic Vista Roof. (<http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM466295/INRL-EA14002-59971P.pdf> and <http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM466296/INRL-EA14002-60016P.pdf>, accessed on March 15, 2017).

43. In addition, Ford explained how it gathers complaints through its internal system:

a. Ford receives and documents reports from customers, dealerships, and Ford Motor Company in its FMC 360 system;

b. Ford's Common Quality Indicator System contains communications and reports from vehicle service and technical support activities and field operations;

c. Ford's Analytical Warranty System contains warranty claims received by Ford; and

d. Ford's Legal Claims/Lawsuits system contains those matters in litigation. (<http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM466295/INRL-EA14002-59971P.pdf> and <http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM466296/INRL-EA14002-60016P.pdf>, accessed on March 15, 2017).

44. In response to NHTSA's request, Ford compiled its own data for the Explorer, Edge, and Escape sunroof shattering complaints. These charts show the number of non-duplicative complaints that Ford submitted to NHTSA on September 2, 2014:

a. 2011-2014 Ford Explorer

CATEGORY OF COMPLAINT INFORMATION	NUMBER OF COMPLAINTS
AWS	1
CQIS	20
FM360	9
Legal Claims/Lawsuits	1
TOTAL	31

See NHTSA Investigation No. EA-14002, 09/02/14 (Appendix C: Ford Explorer).

b. 2011-2014 Ford Edge

CATEGORY OF COMPLAINT INFORMATION	NUMBER OF COMPLAINTS
AWS	4
CQIS	44
FM360	42
Legal Claims/Lawsuits	3
TOTAL	93

See NHTSA Investigation No. EA-14002, 09/02/14 (Appendix C: Ford Edge).

c. 2013-2014 Ford Escape

CATEGORY OF COMPLAINT INFORMATION	NUMBER OF COMPLAINTS
AWS	1
CQIS	16
FM360	11
Legal Claims/Lawsuits	1
TOTAL	29

See NHTSA Investigation No: EA-14002, 09/02/14 (Appendix C: Ford Escape).

45. Ford internally tracks information regarding panoramic sunroof failures through drivers, dealerships, complaints, warranty claims, replacement part data, dealings with insurance carriers, and other aggregated sources. Ford has nearly exclusive access to this information, including its pre-release testing of vehicle components, so it is implausible that Ford had no knowledge very early on about the defect. According to Ford's own data, the actual number complaints about panoramic sunroof failure is more than *double* the number of complaints NHTSA documented for all models of Class Vehicles, and potentially even higher

1 given that the data described above is for only a few, limited models and years of Class
2 Vehicles.

3 46. On April 14, 2016, NHTSA made a second request for information, requesting
4 Ford identify all Ford panoramic roofs and complaints of shattered roofs for model years 2006-
5 2016. *See* Exhibit 3 (Nat'l Highway Traffic Safety Admin., *EA12-002: General Order Directed*
6 *to Motor Vehicle Manufactures* (April 14, 2016), available at [http://www-odi.nhtsa.dot.gov/](http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM514031/INLM-EA14002-63477.pdf)
7 [acms/cs/jaxrs/download/doc/UCM514031/INLM-EA14002-63477.pdf](http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM514031/INLM-EA14002-63477.pdf) (accessed on March 15,
8 2017)).

9 47. The response from Ford was due on May 16, 2016, but has not yet been posted
10 on the NHTSA website.

11 48. Upon information and belief, Ford is also aware that other manufacturers whose
12 vehicles suffered from similar shattering problems have voluntarily initiated safety recalls to
13 notify drivers of the danger and repair the sunroofs free of cost.

14 49. Ford conducted a panoramic sunroof recall—for its 2014 Ford Escape vehicles
15 manufactured between October 15 - 22, 2013— where a urethane bond, not ceramic paint, was
16 used to connect the panoramic sunroof to the bracket and was improperly bonded. *See* Letter
17 from Steven Kenner, Ford Motor Company's Global Director of Automotive Safety Office, to
18 Nancy Lewis, Associate Administrator for Enforcement at the NHTSA, regarding the "2014
19 Model Year Ford Escape Safety Recall #14S13—Panorama Roof Glass Assembly Bond" (June
20 30, 2014), available at [https://static.nhtsa.gov/odi/rcl/2014/RCDNN-14V403-8342P.pdf?_](https://static.nhtsa.gov/odi/rcl/2014/RCDNN-14V403-8342P.pdf?_ga=1.130406473.711047123.1487811501)
21 [ga=1.130406473.711047123.1487811501](https://static.nhtsa.gov/odi/rcl/2014/RCDNN-14V403-8342P.pdf?_ga=1.130406473.711047123.1487811501) (accessed on March 15, 2017.) The 2014 Escape
22 recall affected 1,867 vehicles. While Ford issued a recall for the urethane bonding problem that
23 affected approximately 2,000 vehicles, it has done nothing regarding the far more prevalent
24 problem relating to the tempered glass shattering that affects potentially hundreds of thousands
25 of Ford vehicles. Meanwhile, Ford still publicly claims it has a commitment to quality and
26 safety.
27

50. In Ford's most recent 2015-2016 Sustainability Report, Ford's Group Vice President of Quality, Bernie Fowler, states:



"Quality is a journey. This journey is about continuous improvement and, ultimately, transformation. As with any journey, you need to decide where you are going and how you are going to get there."

At Ford Motor Company, we have a clear destination for our quality journey: to deliver world-class quality in every region. We reach our destination by improving every day."



Bernie Fowler
Group Vice President of Quality, Ford

(<http://corporate.ford.com/microsites/sustainability-report-2015-16/index.html>, accessed on March 15, 2017).

51. In that same sustainability report and in the same section as Quality VP Fowler's statement, Ford announces its commitment to safety:

VEHICLE SAFETY

Quality is critical to the safety of our customers and, therefore, to our responsibilities and success as a company. We are trusted to design and manufacture vehicles that achieve high levels of safety over a wide range of real-world conditions.

See <http://corporate.ford.com/microsites/sustainability-report-2015-16/products-safety.html#what> (accessed on March 15, 2017). See also the "safety pages" from the report contained in Exhibit 4.

52. Ford claims that its sunroofs shatter as a result of impact from roadway objects. Rocks or other objects thrown up by cars and trucks on the roadway would not impact the sunroof with sufficient force to cause it to shatter, let alone shatter the sunroof glass *outward*, a fact Ford is aware of as it is described in many driver complaints. More significantly, some Ford panoramic sunroofs have spontaneously shattered *while the vehicle was parked*. The complaints are also viewable online at <https://www-odi.nhtsa.dot.gov/owners/SearchSafetyIssues>.

2014 Ford Explorer. Was sitting in my new Ford Explorer Sport, when heard a loud pop like a gun. Got out and walked around car to see if something it me. . nothing Started to drive away at around 20 mph. started to hear road noise coming from sunroof. Started to retract shad wen noticed glass fragments falling, closed shad pulled over and took pictures. . contacted and have been told that something must have hit the sunroof? Like what I said a meteor!!! They laughed and said I should contact my insurance co. but that's fraud I said? Again, they laughed. . come on Ford stand behind your craftsmanship or get another owner wh2o will? Very disappointed? So what to do now?*TR

(NHTSA ID: 10595844 – Date Complaint Filed 06/04/2014)

2013 Ford Explorer. My panoramic sunroof exploded!! I was sitting in my vehicle, parked in the driveway and heard a loud noise. I got out and checked the tires and around my vehicle. I saw nothing unusual so I got back in, turned the air off and that's when I discovered it was the sunroof. I heard crackling of glass. Got back out and stepped in the back passenger door and looked on top – it had cracked in the shape of an x with a small pop up right in the center. It was obvious that nothing had hit the glass because I was parked in my driveway and the glass was pushed upward instead of inward. I took numerous pictures of the vehicle sitting in my driveway right after this happened. Drove it to the nearest dealership, within a half hour, as per the service mgr. for pre approval of warranty coverage. It was denied twice. Ford's response for denial of warranty coverage: "As per Section 3 of the warranty and policy manual, damaged glass (stone chips, scratches, etc.) is not considered a warrantable condition unless as related to another defective component. The loud noise as described by the customer has generally been found to be the time in which the glass is impacted in other similar cases. The point of impact to the glass is the place in which the glass is

broken and bowed upward (bow upward due to interior cabin pressure is slightly greater than ambient pressure when windows are up and the HVAC system is running.) Unfortunately, this broken glass is considered to be damage that can not be covered under the new vehicle warranty at this time.” 23 days later. . . my \$40k vehicle is still damaged and sitting in my garage b/c this is an ongoing issue with panoramic sunroofs exploding. Ford can not keep up with the demand for replacement glass. I pray someone, especially a child is not injured or even worse killed by this defect. *TR

(NHTSA ID: 10520728 – Date Complaint Filed 06/19/2013)

2013 Ford F-150. I went out to my truck and started it up. I noticed there were tiny shiny specks on the center console. I look up and my sunroof was totally shattered. When I parked the day before everything was fine. There were no trees that something cold have fallen from that might have this. NO other vehicles parked nearby were damaged and vandals usually go for side windows. It was not unusually cold. A short search on the internet shows that this problem is not as isolated as the Ford Dealer that the body shop I’m using called. There are others with Ford products that this has happened to. Some were driving when their sunroofs exploded others came out to find their sunroofs in the same condition as mine. *TR

(NHTSA ID: 10655345 – Date Complaint Filed 11/17/2014)

D. The Dangers Posed to Class Vehicle Occupants

53. NHTSA, KATRI, and responsible automobile manufacturers have acknowledged that the spontaneous failure of panoramic sunroofs endangers drivers, passengers, and others on the road. A panoramic sunroof is an expensive upgrade option that costs thousands of dollars to replace. A reasonable person considering whether to purchase or lease a Ford vehicle would want to be informed about the panoramic sunroof defect before deciding whether to spend the additional money.

54. When panoramic sunroofs shatter, they make a sudden and extremely loud noise, followed by shards of glass raining down onto the driver and passengers. Drivers report that the falling shards of glass have injured them and their passengers and have caused damage to their vehicles. Drivers have also reported a number of near-miss accidents that occurred after

1 they were startled or distracted because the sunroof shattered while the vehicle was in motion.
2 Both Ford and NHTSA have received reports of injuries caused by sunroof failure. *See*
3 Exhibit 1.

4 55. Other manufacturers recognize the safety risk. When Volkswagen initiated a
5 safety recall for shattering panoramic sunroofs, it acknowledged that drivers “could be injured
6 by falling glass,” and that “[i]f the glass panel were to break while the vehicle is in motion, it
7 could cause the driver distraction, increasing the risk of a crash.” *See* Press Release,
8 Volkswagen of America, Inc., *Volkswagen Issues Voluntary Recall* (Dec. 7, 2014),
9 <http://media.vw.com/release/856/> (accessed on March 15, 2017).

10 56. When Hyundai initiated its recall, it too acknowledged that the shattering of
11 panoramic sunroofs “relates to motor vehicle safety,” including by posing a risk of injury to
12 vehicle occupants. In connection with the Hyundai recall, NHTSA wrote that the breaking of
13 the panoramic sunroof could lead “to personal injury or a vehicle crash.” *See* Letter from
14 Robert Babcock, Hyundai America Technical Center, Inc. (HATCI)’s Director of Certification
15 and Compliance Affairs, to Nancy Lewis, Associate Administrator for Enforcement at the
16 NHTSA, regarding “Defect Information Report” (December 6, 2012), [https://static.nhtsa.gov/](https://static.nhtsa.gov/odi/rcl/2012/RCDNN-12V568-7763.pdf?_ga=1.68163031.711047123.1487811501)
17 [odi/rcl/2012/RCDNN-12V568-7763.pdf?_ga=1.68163031.711047123.1487811501](https://static.nhtsa.gov/odi/rcl/2012/RCDNN-12V568-7763.pdf?_ga=1.68163031.711047123.1487811501) (accessed
18 on March 15, 2015).

19 57. In connection with an Audi recall, NHTSA wrote that “should the sunroof’s
20 glass break while the vehicle is in use, the falling glass could cut and injure the driver or
21 passengers [and] could also distract the driver, increasing the risk of a crash.”

22 58. KATRI concluded that the sudden shattering of a panoramic sunroof while
23 driving may cause “abrasions due to shattered glass” and also cause the “risk of secondary
24 accidents.”

25 59. In December of 2012, KATRI launched an investigation that culminated in
26 November 2013 when it met with numerous car manufacturers in Seoul, South Korea,
27

1 announcing its finding that the ceramic tint in panoramic sunroofs substantially weakened the
2 glass and compromising its safety. KATRI recommended widespread recalls—a
3 recommendation unheeded by Ford.

4 **E. Ford Refuses to Warn Drivers**

5 60. Despite the high number of complaints and the danger posed by the defect, Ford
6 continues to conceal its existence from current and potential customers alike. Ford has not
7 warned consumers at the point of sale/lease or when drivers who have experienced a shattered
8 sunroof bring their vehicles in for repairs, making no effort to alert consumers of the risk. Ford
9 knows of the defect yet continues to profit from the sale and lease of vehicles to unwitting
10 customers.

11 61. Ford conceals the defect even though it knows it is not reasonably discoverable
12 by consumers unless they experience a failure and are exposed to the attendant safety risks.

13 62. Ford remains silent even as it continues to receive complaints from concerned
14 drivers and the NHTSA investigators, and blames impact from external objects even though
15 Ford knows the problem is the defective sunroof.

16 63. As a result of Ford's inaction and silence, consumers are unaware that they
17 purchased or leased a vehicle which has a defective sunroof, and continue to drive these unsafe
18 vehicles. In addition, consumers who experienced a failure and brought their vehicles to a
19 dealership for repairs are not told that identically defective sunroofs are installed as
20 replacements in their vehicles.

21 64. Other manufacturers of vehicles with similar panoramic sunroof problems—
22 such as Audi, Hyundai, and Volkswagen—voluntarily initiated safety recalls, notifying drivers
23 of the danger and offering to repair the sunroofs free of cost.

F. Ford's Deceptive Warranty Practices

65. The relevant terms of the Ford and Mercury brand Class Vehicles' warranties are substantially the same: they are backed by a bumper-to-bumper warranty that lasts for three years or 36,000 miles, whichever comes first, and five-year/60,000 mile powertrain coverage.

66. The relevant terms of Ford's Lincoln brand Class Vehicles warranty are substantially the same: they are backed by bumper-to-bumper coverage that lasts for four years or 50,000 miles, whichever comes first, and six-year/70,000 mile powertrain coverage.

67. Plaintiffs and/or Class Members experienced damage from the Defect within the warranty periods of their vehicles. Plaintiffs and/or Class Members reasonably expected that any and all damage that resulted from the sunroof defect would be covered under the warranty, and that they would not be charged for such repairs.

68. Ford has systematically denied coverage with respect to the defective sunroofs. Plaintiffs and numerous Class Members have been forced to incur substantial repair bills and other related damages, including being forced to make claims under their automotive insurance policies and incurring substantial deductibles.

VI. PLAINTIFFS' EXPERIENCE

69. On September 25, 2012, Jacob and Jessica Beaty purchased a new 2013 Ford Escape, Titanium model/VIN: 1FMCU9J96DUB088941 from Scarff Ford in Auburn, Washington for a purchase price of \$32,940. The Beatys' Titanium model included Ford's "Power Panoramic Vista Roof."

70. Prior to buying their Escape, the Beatys did extensive research for a new car that would meet their requirements for safety, reliability, space for the children they intended to have in the near future, and budget. This research included:

- Researching safety and quality ratings on the internet, including researching the Escape generally;
- Talking with a family member who was pleased with the Ford Escape;

- 1 • Driving a rental Escape while on vacation prior to their purchase;
- 2 • Relying on the quality of the former Ford Mustang that Jessica Beaty
- 3 owned and drove for 12 years; and
- 4 • Talking extensively with sales people at Scarff Ford about this
- 5 particular car and customer satisfaction.
- 6

7 71. The Beatys were also interested in the Ford Explorer, which was the other SUV
8 recommended by the salespersons at Scarff Ford, but the cost was prohibitive. The panoramic
9 sunroof feature on the Escape Titanium was a huge selling point for the Beatys, especially
10 when they thought of how their future children would enjoy seeing the sky from the back seat.
11 The Beatys now have a three-year-old son and eight-month-old daughter. Prior to their sunroof
12 exploding on February 8, 2017, their children enjoyed the Titanium's sunroof from their car
13 seats in the back, especially when an airplane crossed overhead.

14 72. At approximately 2:00 p.m. on February 8, 2017, Jessica Beaty was driving
15 home from an appointment in Issaquah, Washington. Her young daughter was riding in the
16 back seat. The weather was rainy. Traveling on I-5 South near the Tacoma Dome at about 60
17 miles per hour, Ms. Beaty heard an explosion which sounded like a shotgun being fired. She
18 was panicked, but needed to find out what happened. Being careful of the nearby on and off
19 ramp traffic, initially she was only able to look up and see that the sunroof was missing a lot of
20 glass. The proximity of the on and off ramps made it difficult to exit and Mrs. Beaty feared
21 being hit, so she continued driving at about 55 miles per hour, checked on her daughter, and
22 closed the sunroof cover. Upon closing the sunroof cover, more glass flew down into it. Some
23 glass shards fell into the vehicle as well.

24 73. When it was safe to get out of the vehicle, Mrs. Beaty exited, parked, and
25 checked on her daughter. Her daughter had a scratch on her forehead. Mrs. Beaty had multiple
26 scratches on her hands.

27

1 74. Below is a photograph of the shattered sunroof in the Beatys' 2013 Escape
2 Titanium.



23
24
25 75. After checking on her daughter and removing all of the glass inside the car,
26 Mrs. Beaty drove from Tacoma to Mullenix Ford in Olympia, Washington to get the sunroof
27 repaired. The Olympia dealership was closer than the dealership in Auburn where the Beatys

1 purchased their 2013 Escape. A Mullenix representative told Mrs. Beaty that she was out of
 2 warranty and that they would not cover the repair. She was then sent to Auto Glass
 3 Professionals, also located in Olympia.

4 76. The Beatys made a claim for the sunroof repair through their car insurance
 5 carrier Travelers and paid a \$500 deductible. In addition, they paid out of pocket \$110.94 for a
 6 rental car from Enterprise Rent-A-Car to use during the three days that the sunroof was being
 7 replaced—the overage that Travelers did not cover. Travelers paid the rest of the rental car
 8 charges.

9 77. Auto Glass Professionals represented to the Beatys that they replaced the
 10 sunroof with the same manufacturer/model sunroof as the factory-installed version. The Beatys
 11 therefore paid twice for a panoramic sunroof feature that they now cannot enjoy. They fear
 12 opening the sunroof shade because the sunroof might shatter again.

13 78. Had Ford disclosed the panoramic sunroof defect, the Beatys would not have
 14 purchased the vehicle or they would have paid substantially less for it given this safety defect.
 15 In addition, they would not have suffered the economic damages that they sustained from the
 16 sunroof failure. The Beatys did not receive the benefit of their bargain. Ford failed to disclose
 17 the Defect and the attendant risks associated with the Defect at the point of sale or otherwise.

18 **VII. CLASS ACTION ALLEGATIONS**

19 79. Pursuant to Fed. R. Civ. P. 23, Plaintiffs bring this action on behalf of
 20 themselves and all others similarly situated as members of the following proposed Nationwide
 21 and Washington State classes (collectively, the “Classes”), on their federal and state claims as
 22 purchasers and lessees of “Class Vehicles.” Class Vehicles include all models below that are
 23 equipped with substantially similar factory-installed panoramic sunroofs:

- 24 • 2007-present model year Ford Edge vehicles;
- 25 • 2009-present model year Ford Focus vehicles;
- 26 • 2010-present model year Ford Fusion vehicles;
- 27

- 2011-present model year Ford Explorer vehicles;
- 2009-present model year Ford Flex vehicles;
- 2011-present model year Ford F 150 vehicles;
- 2009-2014 model year Ford Mustang vehicles;
- 2008-present model year Ford Escape vehicles;
- 2014-present model year Transit Connect vehicles;
- 2013-present model year Ford C-Max vehicles;
- 2007-present model year Lincoln MKX vehicles;
- 2009-2015 model year Lincoln MKS vehicles;
- 2013-present model year Lincoln MKZ vehicles;
- 2010-present model year Lincoln MKT vehicles;
- 2010-2011 model year Mercury Milan vehicles; and
- 2010-2011 model year Mercury Montego vehicles.

Nationwide Class:

All persons and entities residing in the United States, including its territories, who purchased or leased a Class Vehicle.

Washington Class:

All persons and entities residing in Washington who purchased or leased a Class Vehicle in Washington.

Excluded from the proposed classes are Ford; any affiliate, parent, or subsidiary of Ford; any entity in which Ford has a controlling interest; any officer, director, or employee of Ford; any successor or assign of Ford; anyone employed by counsel in this action; any judge to whom this case is assigned, his or her spouse; members of the judge's staff; and anyone who purchased the Class Vehicle for the purpose of resale.

1 80. Members of the proposed classes are readily ascertainable because the class
2 definitions are based upon objective criteria.

3 81. Numerosity. Ford sold many thousands of Class Vehicles, including a
4 substantial number in Washington. Members of the proposed classes likely number in the
5 thousands and are thus too numerous to practically join in a single action. Class Members may
6 be notified of the pendency of this action by mail, supplemented by public notice (if deemed
7 necessary or appropriate by the Court).

8 82. Commonality and Predominance. Common questions of law and fact exist as to
9 all proposed members of the Classes and predominate over questions affecting only individual
10 class members. These common questions include:

11 a. Whether the sunroofs in the Class Vehicles have a propensity to
12 spontaneously shatter;

13 b. Whether Ford knew or should have known that its panoramic sunroofs
14 have a propensity to spontaneously shatter, and if so, when Ford discovered this;

15 c. Whether the knowledge of this propensity to shatter would be important
16 to a reasonable person, because, among other things, it poses an unreasonable safety hazard;

17 d. Whether Ford failed to disclose and concealed from potential customers
18 the existence of the sunroofs' propensity to spontaneously shatter;

19 e. Whether Ford breached its warranty obligations;

20 f. Whether the Court may enter an injunction requiring Ford to notify
21 owners and lessees about the panoramic sunroofs' propensity to spontaneously shatter;

22 g. Whether the Court may enter an injunction requiring Ford to cease its
23 practice of replacing shattered panoramic sunroofs with identically defective replacement
24 sunroofs;

25 h. Whether Ford engaged in unfair or deceptive acts or practices in
26 violation of RCW 19.86.020, as alleged herein; and
27

i. Whether Ford's conduct, as alleged herein, entitles Plaintiffs and the Classes they represent to damages or restitution under the laws of their respective states.

83. Typicality. Plaintiffs' claims are typical of the claims of the proposed classes. Plaintiffs and the members of the proposed classes all purchased or leased Class Vehicles with panoramic sunroofs that have a propensity to spontaneously shatter, giving rise to substantially the same claims. As illustrated by class member complaints, some of which are excerpted above, each vehicle model included in the proposed class definitions has a panoramic sunroof with the same Defect.

84. Adequacy. Plaintiffs are adequate representatives of the proposed classes because their interests do not conflict with the interests of the members of the classes they seek to represent. Plaintiffs retained counsel who are competent and experienced in complex class action litigation, and will prosecute vigorously on Class Members' behalf.

85. Superiority. A class action is superior to other available means for the fair and efficient adjudication of this dispute. The injury suffered by each Class Member, while meaningful on an individual basis, is not of such magnitude as to make the prosecution of individual actions against Ford economically feasible. Even if Class Members themselves could afford individualized litigation, the court system could not. In addition to the burden and expense of managing many actions arising from the defective sunroofs, individualized litigation increases the delay and expense to all parties and the court system presented by the legal and factual issues of the case. By contrast, a class action presents far fewer management difficulties and provides the benefits of single adjudication, economy of scale, and comprehensive supervision by a single court.

86. In the alternative, the proposed classes may be certified because:

a. the prosecution of separate actions by the individual members of the proposed classes would create a risk of inconsistent adjudications, which could establish incompatible standards of conduct for Ford;

b. the prosecution of individual actions could result in adjudications that as a practical matter would be dispositive of the interests of non-party Class Members, or which would substantially impair their ability to protect their interests; and

c. Ford acted or refused to act on grounds generally applicable to the proposed classes, thereby making appropriate final and injunctive relief with respect to members of the proposed classes as a whole.

VIII. TOLLING OF THE STATUTES OF LIMITATIONS

87. Discovery Rule. Plaintiffs' and Class Members' claims accrued upon discovery that the panoramic sunroofs installed in their Class Vehicles were prone to spontaneous failure. While Ford knew, and concealed, the fact that the panoramic sunroofs installed in the Class Vehicles have a defect that causes spontaneous failure, Plaintiffs and Class Members could not and did not discover this fact through reasonable diligence.

88. Active Concealment Tolling. Any statutes of limitations are tolled by Ford's knowing and active concealment of the fact that the panoramic sunroofs installed in the Class Vehicles suffered from the Defect. Ford had a duty to disclose this defect and its consequent performance and safety problems to Plaintiff and Class Members because Ford had knowledge of this defect and the defect was not known to nor easily discoverable by Plaintiff and Class Members. Despite its affirmative duty to disclose the nature and existence of this defect, Ford kept Plaintiffs and Class Members ignorant of vital information essential to the pursuit of their claim, without any fault or lack of diligence on the part of Plaintiffs. The details of Ford's efforts to conceal its above-described unlawful conduct are in its possession, custody, and control, to the exclusion of Plaintiffs and Class Members. Plaintiffs and Class Members could not have reasonably discovered the fact that the panoramic sunroofs installed in their Class Vehicles were defective.

89. Estoppel. Ford was and is under a continuous duty to disclose to Plaintiffs and Class Members the true character, quality, and nature of the panoramic sunroofs installed in the

1 Class Vehicles. At all relevant times, and continuing to this day, Ford knowingly, affirmatively,
 2 and actively concealed the true character, quality, and nature of the panoramic sunroofs
 3 installed in the Class Vehicles. The details of Ford's efforts to conceal its above-described
 4 unlawful conduct are in its possession, custody, and control, to the exclusion of Plaintiffs and
 5 Class Members. Plaintiffs reasonably relied upon Ford's active concealment. Based on the
 6 foregoing, Ford is estopped from relying on any statutes of limitation in defense of this action.

7 90. Equitable Tolling. Ford took active steps to conceal the fact that it wrongfully,
 8 improperly, illegally, and repeatedly manufactured, marketed, distributed, sold, and leased
 9 Class Vehicles with defective panoramic sunroofs. The details of Ford's efforts to conceal its
 10 above-described unlawful conduct are in its possession, custody, and control, to the exclusion
 11 of Plaintiffs and Class Members. However, Ford's failure to disclose and active concealment of
 12 the defect amounts to bad faith and deception in and of itself. When Plaintiffs learned about
 13 this material information, they exercised due diligence by thoroughly investigating the
 14 situation, retaining counsel, and pursuing their claims. Ford fraudulently concealed its above-
 15 described wrongful acts. Should such tolling be necessary, therefore, all applicable statutes of
 16 limitation are tolled under the doctrine of equitable tolling.

17 **IX. CLAIMS FOR RELIEF**

18 **COUNT 1**

19 **EXPRESS WARRANTY**

20 **(On behalf of the Nationwide Class, and alternatively on behalf of the Washington Class)**

21 91. Plaintiffs re-allege and incorporate by reference the preceding paragraphs as
 22 though fully set forth herein.

23 92. Ford provides all purchasers and lessees of the Class Vehicles with the express
 24 warranties described herein, which became part of the basis of the bargain.

25 93. The parts affected by the defect, including the panoramic sunroofs and the
 26 brackets and assemblies to which the sunroofs were attached, were manufactured and
 27

1 distributed by Ford in the Class Vehicles and are covered by the warranties Ford provides to all
2 purchasers and lessors of Class Vehicles.

3 94. Ford breached these warranties by selling and leasing Class Vehicles with the
4 panoramic sunroof defect, requiring repair or replacement within the applicable warranty
5 periods, and refusing to honor the warranties with free repairs or replacements during the
6 applicable warranty periods.

7 95. Ford further breached these warranties by not correcting the defect. Although
8 Ford warranted that it would correct defects in materials and workmanship in the Class
9 Vehicles, Ford instead replaced shattered sunroofs in the Class Vehicles with identical
10 defective sunroofs and thus has not corrected the defect. Ford has failed and refused to
11 conform the panoramic sunroofs in the Class Vehicles to the express warranty. Ford's conduct
12 has voided any attempt to disclaim liability for its actions.

13 96. Plaintiffs notified Ford of the breach within a reasonable time or were not
14 required to do so, because affording Ford a reasonable opportunity to cure its breach of written
15 warranty would have been futile. Ford knew of the defect and chose to conceal it and to fail to
16 comply with its warranty obligations. Further, the replacement sunroof used by Ford is also
17 defective.

18 97. Ford's attempt to disclaim or limit these express warranties vis-à-vis consumers
19 is unconscionable and unenforceable under these circumstances. Ford's warranty limitation is
20 unenforceable because it knowingly sold a defective product without informing consumers
21 about the defect.

22 98. Ford's attempt to limit its express warranty in a manner that would result in
23 replacing its defectively designed panoramic sunroofs with identical defective sunroofs causes
24 the warranty to fail its essential purpose and renders the warranty null and void.

25 99. The time limits contained in Ford's warranty period were also unconscionable
26 and inadequate to protect Plaintiffs and Class Members. Among other things, Plaintiffs and
27

1 Class Members had no meaningful choice in determining these time limitations, the terms of
 2 which unreasonably favored Ford. A gross disparity in bargaining power exists between Ford
 3 and the Class Members, and Ford knew or should have known that the panoramic sunroofs in
 4 the Class Vehicles were defective at the time of sale and would fail well before the end of their
 5 useful lives.

6 100. Plaintiffs and Class Members have complied with all obligations under the
 7 warranty, or otherwise have been excused from performance of those obligations as a result of
 8 Ford's conduct described herein.

9 101. As a direct and proximate cause of Ford's breach, Plaintiffs and the other Class
 10 Members bought or leased Class Vehicles they otherwise would not have, overpaid for their
 11 vehicles, did not receive the benefit of their bargain, and their Class Vehicles suffered a
 12 diminution in value. Plaintiffs and Class Members have also incurred and will continue to
 13 incur costs for repair and replacement of defective panoramic sunroofs and damage resulting
 14 from the spontaneous shattering of such sunroofs.

15 102. Plaintiffs and Class Members are entitled to legal and equitable relief against
 16 Ford, including damages, consequential damages, specific performance, attorney fees, costs of
 17 suit, and such further relief as the Court may deem proper.

18 **COUNT 2**

19 **FRAUDULENT CONCEALMENT/NONDISCLOSURE**

20 **(On behalf of the National Class, and alternatively on behalf of the Washington Class)**

21 103. Plaintiffs re-allege and incorporate by reference all preceding paragraphs.

22 104. Ford knew or should have known that the Class Vehicles were and are defective
 23 in the materials and workmanship of their panoramic sunroofs which made and makes the
 24 panoramic sunroofs prone to spontaneously shatter.

25 105. Ford fraudulently concealed from and/or failed to disclose to Plaintiffs, Class
 26 Members, and all others in the chain of distribution (i.e., concealments and omissions in Ford's
 27

1 communications with suppliers, wholesalers, retailers, service centers, and others in the chain
2 of distribution that were ultimately passed on to Plaintiffs and the Class) the true nature of the
3 Class Vehicles and, specifically, the Defect.

4 106. Ford was and is under a duty to Plaintiffs and the Class to disclose these facts
5 because:

6 a. Ford is in a superior position to know the facts regarding the Defect in
7 the Class Vehicles and that the Defect is/was latent and not easily discoverable by Plaintiffs
8 and Class Members;

9 b. Ford made partial disclosures about the quality of the Class Vehicles
10 while not revealing the defective nature of their panoramic sunroofs;

11 c. The Defect poses a safety hazard to Plaintiffs and Class Members; and

12 d. Ford fraudulently or recklessly concealed the defective nature of the
13 Class Vehicles from Plaintiffs and the Class.

14 107. The facts not concealed and/or disclosed by Ford to Plaintiffs and the Class are
15 material facts that a reasonable person would have considered important in deciding whether or
16 not to purchase (or to pay the same price for) a motor vehicle.

17 108. Ford intentionally, willfully, maliciously or recklessly concealed and/or failed to
18 disclose the problems with the Class Vehicles for the purpose of inducing Plaintiff and the
19 Class to purchase the Class Vehicles.

20 109. Plaintiffs and Class Members did not know about the Defect and could not have
21 known about the Defect when they purchased the Class Vehicles because of Ford's
22 concealment of the Defect.

23 110. Plaintiffs and the Class justifiably acted or relied upon—to their detriment—the
24 concealed and/or non-disclosed facts as evidenced by their purchases of the Class Vehicles
25 and/or replacement panoramic sunroofs.

111. Had Plaintiffs and the Class known of the Defect, they would not have purchased (or would have paid substantially less for) their Class Vehicles.

112. As a direct and proximate result of Ford's misconduct, Plaintiffs and Class Members have suffered actual damages in that they bought and own Class Vehicles that contain the Defect. Plaintiffs and Class Members have either already experienced their panoramic sunroof spontaneously shattering or are substantially like to experience it and be required to incur costs to repair or replace the defective sunroof. Further, Ford offers no replacement for the defective sunroofs other than the same defective sunroof and parts, thereby rendering any repair/replacement useless and continuing to diminish the value of the Class Vehicle.

113. Plaintiffs and Class Members have suffered losses resulting from Ford's fraudulent or reckless non-disclosure. Accordingly, Ford is liable for all damages proximately caused by its conduct in an amount to be proven at trial.

114. Ford's acts were done wantonly, maliciously, oppressively, deliberately, with intent to defraud, and in reckless disregard of Plaintiffs' and Class Members' rights and the representations that Ford made to them, in order to enrich Ford. Ford's conduct warrants an assessment of punitive damages in an amount sufficient to deter such conduct in the future in an amount to be determined according to proof.

COUNT 3

VIOLATIONS OF THE WASHINGTON CONSUMER PROTECTION ACT, RCW 19.86.010, ET SEQ.

(On behalf of the Washington Class)

115. Plaintiffs re-allege and incorporate by reference the preceding paragraphs as though fully set forth herein.

116. Ford is a "person" within the meaning of RCW 19.86.010(2) and conducts "trade" and "commerce" within the meaning of RCW 19.86.010(2).

117. The conduct described in this complaint constitutes unfair and deceptive acts or practices in violation of the Washington CPA.

118. Ford engaged in unfair and deceptive acts or practices by engaging in a pattern and practice of: (i) failing to disclose that its Class Vehicles, and the panoramic sunroofs in its Class Vehicles, were not of a particular standard, quality, or grade; (ii) failing to disclose, at and after the time of purchase or lease and repair, any and all known material defects or material nonconformity of the Class Vehicles, including the panoramic sunroofs of the Class Vehicles; (iii) failing to disclose at the time of purchase or lease that the Class Vehicles, including the panoramic sunroofs of the Class Vehicles, were not in good working order, were defective, and were not fit for their intended purpose; (iv) failing to give adequate warnings and notices regarding the use, defects, and problems with the Class Vehicles' panoramic sunroofs to customers and consumers who purchased and leased Class Vehicles, even though Ford possessed prior knowledge of the inherent defects in the panoramic sunroofs; (v) failing to disclose, either through warnings or recall notices, and actively concealed the fact that the Class Vehicles' panoramic sunroofs were defective, even though Ford learned of the defects through consumer complaints as early as 2008, if not before; (vi) causing Plaintiffs and members of the class to expend sums of money at its dealerships to repair and/or replace the Class Vehicles' panoramic sunroofs, despite Ford's knowledge of the defect; and (vii) replacing the Class Vehicles' panoramic sunroofs with equally defective panoramic sunroofs.

119. Ford's systematic practice of failing to disclose defects in the Class Vehicles' panoramic sunroofs, failing to give adequate warnings regarding defects with the class Vehicles' panoramic sunroofs, and failing to repair the Class Vehicles' panoramic sunroofs are unfair because these acts or practices offend public policy as it has been established by statutes, regulations, the common law or otherwise, including, but not limited to, the public policy established by RCW 19.230.005.

120. Ford's systematic practice of failing to disclose defects in the Class Vehicles' panoramic sunroofs, failing to give adequate warnings regarding defects with the Class Vehicles' panoramic sunroofs, and failing to repair the Class Vehicles' panoramic sunroofs are

1 unfair because these acts or practices: (1) cause substantial financial injury to Plaintiffs and
2 Class Members; (2) are not outweighed by any countervailing benefits to consumers or
3 competitors; and (3) are not reasonably avoidable by consumers.

4 121. Ford's unfair and deceptive conduct was likely to deceive consumers into
5 purchasing Class Vehicles with panoramic sunroofs, to pay a premium for the sunroofs, and to
6 pay to repair or replace the sunroofs.

7 122. As a direct and proximate result of Ford's unfair and deceptive acts and
8 practices, Plaintiffs and Class Members have been injured in that they have purchased Class
9 Vehicles with defective panoramic sunroofs, paid a premium for the defective sunroofs, and
10 paid to replace the defective sunroofs with similarly defective sunroofs. Plaintiffs and Class
11 Members would not have purchased the Class Vehicles or would have paid substantially less
12 had they known about the Defect.

13 123. Ford's unfair or deceptive acts or practices have occurred in its trade or business
14 and affect the public interest because they were and are capable of deceiving a substantial
15 portion of the public and expose them to safety hazards. Ford's conduct is ongoing and has a
16 substantial likelihood of being repeated. There is a likelihood Ford's conduct will injure other
17 members of the public.

18 124. Apart from the capacity of Ford's unfair and deceptive acts and practices to
19 injure other members of the public, such acts and practices also offend the public policy laid
20 out in RCW 46.70.005, RCW 46.70.101, and RCW 46.70.180, and that statute specifically
21 provides: "Any violation of this chapter is deemed to affect the public interest and constitutes a
22 violation of chapter 19.86 RCW" in RCW 46.70.310.

23 125. Pursuant to RCW 19.86.090, Plaintiffs and the Washington Class seek an order
24 enjoining Ford's unfair and deceptive acts or practices, damages, treble damages, attorneys'
25 fees, and any other proper and just relief under the Washington CPA.
26
27

COUNT 4

**BREACH OF IMPLIED WARRANTY OF MERCHANTABILITY, RCW 62A.2-314
AND 62A.2A-212**

(On behalf of the Washington Class)

126. Plaintiffs re-allege and incorporate by reference the preceding paragraphs as though fully set forth herein.

127. Ford is and was at all times a “merchant” with respect to motor vehicles under RCW 62A.2-104(1).

128. The Class Vehicles are and were at all relevant times “goods” within the meaning of RCW 62A.2-105(1).

129. Ford was and is in actual or constructive privity with Plaintiffs and Class Members.

a. Plaintiffs and Class members had and continue to have sufficient direct dealings with Ford and/or its authorized dealers, franchisees, representatives, and agents to establish any required privity of contract. Ford’s authorized dealers, franchisees, representatives, and agents were not intended to be the ultimate consumers of the Class Vehicles and have no rights under the warranty agreements provided with the Class Vehicles. The warranty agreements were designed for and intended to benefit only the ultimate purchasers and lessees of the Class Vehicles, i.e., Plaintiffs and class members.

b. Privity is not required to assert this claim because Plaintiffs and class members are intended third-party beneficiaries of contracts between Ford and its dealers, franchisees, representatives, and agents.

c. By extending express written warranties to end-user purchasers and lessees, Ford brought itself into privity with Plaintiffs and class members.

130. At all relevant times, Washington law imposed upon Ford a duty that the sunroofs installed in the Class Vehicles be fit for the ordinary purpose for which sunroofs are used and that they pass without objection in the trade.

1 131. Ford has not validly disclaimed, excluded, or modified the implied warranties or
2 duties described above, and any attempted disclaimer or exclusion of the implied warranties
3 was and is ineffectual.

4 132. Ford failed to inform Plaintiffs and Class Members of the defective condition of
5 the panoramic sunroofs. The failure to warn Plaintiffs and class members of this defective
6 condition constitutes a further breach by Ford of the implied warranties of merchantability.

7 133. Plaintiffs and Class Members used the sunroofs installed in the Class Vehicles in
8 a manner consistent with their intended use and performed each and every duty required under
9 the terms of the warranties, except as may have been excused or prevented by the conduct of
10 Ford or by operation of law in light of Ford's unconscionable conduct.

11 134. Ford was provided notice of these issues by a number of means, including but
12 not limited to, its internal tracking procedures including direct communications from
13 consumers, NHTSA consumer complaints, NHTSA Investigation EA 14-002, information
14 available on internet forums, trade magazine articles, and at least one complaint filed against it
15 styled Case No: 2:16-CV-01154, *Douglas Krebsbach et al. v Ford Motor Company*, in the
16 United States District Court for the Eastern District of California. Ford failed and refused to
17 offer an effective remedy despite this notice.

18 135. Ford's conduct constitutes a breach of the implied warranty of merchantability.
19 As a direct and proximate result of Ford's breach of the implied warranty of merchantability,
20 Plaintiffs and the Washington Class have suffered economic damage, including the premiums
21 they paid for Class Vehicles with panoramic sunroofs, losses attributable to the diminished
22 value of their Class Vehicles, loss of use of their Class Vehicles, and money spent to repair and
23 replace their defective sunroofs.

24 136. Plaintiffs and Class Members are entitled to legal and equitable relief against
25 Ford, including damages, consequential damages, specific performance, attorneys' fees, costs,
26 and any further relief the Court may deem proper.
27

X. PRAYER FOR RELIEF

WHEREFORE, Plaintiffs request that the Court enter a judgment awarding the following relief:

A. An order certifying the proposed classes and appointing Plaintiffs and their counsel to represent the Classes;

B. An order awarding Plaintiffs and Class Members their actual damages, punitive damages, and/or any other form of monetary relief provided by law;

C. An order awarding Plaintiffs and Class Members restitution, disgorgement, or other equitable relief as the Court deems proper;

D. An order requiring Ford to cease selling vehicles with the defective panoramic sunroofs and to adequately disclose and repair the defective panoramic sunroofs;

E. An order awarding Plaintiffs and Class Members pre-judgment and post-judgment interest as allowed under the law;

F. An order awarding Plaintiffs and Class Members reasonable attorneys' fees and costs of suit, including expert witness fees; and

G. An order awarding such other and further relief as this Court may deem just and proper.

XI. JURY DEMAND

Pursuant to Fed. R. Civ. P. 38(b), Plaintiffs demand a trial by jury all issues so triable under the law.

1 RESPECTFULLY SUBMITTED AND DATED this 16th day of March, 2017.

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EXHIBIT 1¹

**NHTSA CONSUMER COMPLAINTS REGARDING FORD SHATTERING
AND EXPLODING SUNROOFS**

<https://www-odi.nhtsa.dot.gov/owners/SearchResults>; [key words searched
for Ford and Lincoln: “panoramic”, “sunroof”, and “moonroof”]; *accessed
on February 27, 2017*

¹ Consumer reports were excerpted for spacing purposes. Further, they were not corrected for grammar, spelling, and punctuation errors—the words were copied as submitted to NHTSA.

Exhibit 1, Page 1 NHTSA Consumer Complaints Regarding Ford Shattering and Exploding
Sunroofs

#	Date of NHTSA Complaint	Date of Incident	Model Year	Ford Model	NHTSA ID Number	NHTSA Consumer Complaint Excerpt
1.	3/17/2008	3/8/2008	2007	Edge	10221452	“nothing hit the sunroof, it just completely shattered”
2.	8/4/2008	8/4/2008	2008	Edge	10236939	“while driving down the road, my sunroof completely shattered. . . there were no striking marks. . . event was so fast and loud, some debris blew back onto following vehicles creating a hazard”
3.	8/6/2008	7/24/2008	2008	Edge	10237272	“reports a sudden explosion in the car. . . like he was shot. . . small shards of broken glass rain down on them. . . upon examining sunroof, they observed a hole the size of a small dinner plate in the center of the roof and all four corners missing. The glass in the middle and corners of the sunroof had the appearance? Like a volcano?”
4.	7/28/2009	7/18/2009	2006	Explorer	10278547	“an explosion followed immediately by shattering glass cascading down upon me. . . sunroof glass that was still in the sunroof frame was angling upward as if it had been struck from inside”
5.	11/9/2009	11/9/2009	2008	Escape	10291579	“open the cover on my sunroof about 1 inch and noticed it looked shattered. . . looked like it exploded. The glass was like a volcano erupted.”
6.	12/6/2009	11/15/2009	2009	F-150	10294643	“sunroof shattered into hundreds of tiny pieces while truck was sitting in garage”
7.	3/3/2010	2/13/2010	2008	Edge	10316239	“My family and I were driving down the freeway when the panoramic moonroof on my 2008 Ford Edge shattered. We were not near an underpass or close to another vehicle. It does

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NHTSA Consumer Complaints Regarding Ford Shattering and Exploding Sunroofs

						not appear to have been caused any foreign object. We heard loud pop, which my husband thought was a gun shot. H felt the shade and could feel pieces of glass weighing the shade down.” . . . Fortunately the shade was closed at the time or the pieces of glass would have landed on my husband while driving and on my infant son and me in the back seat.”
8.	3/10/2010	2/22/2010	2009	Focus	10315205	“well my sunroof just exploded from the inside out”
9.	5/25/2010	5/24/21010	2005	Escape	10332263	“sunroof shattered in our 2005 Ford Escape for no reason”
10.	6/14/2010	6/11/2010	2010	Escape	10336253	“when I heard a very loud pop and the sunroof glass had completely shattered”
11.	7/26/2010	7/23/2010	2009	Focus	10345559	“on the highway when we hear a loud noise. Scared all of us. Then I heard glass falling on the cover of the sunroof. The thing had exploded and shattered!”
12.	8/12/2010	8/10/2010	2010	Escape	10349108	“driving 35 mph the sun roof exploded inside the vehicle”
13.	9/13/2010	9/11/2010	2010	Focus	10355144	“heard a loud boom and glass was all over me. The sun roof had shattered.”
14.	1/10/2011	1/10/2011	2005	Escape	10375439	“driving down the freeway this morning and my sunroof exploded!”
15.	2/18/2011	2/17/2011	2010	Focus	10383260	“While driving approximately 65mp with the sun roof closed and the glass shattered. Nothing hit the roof nor was she driving underneath an overpass.”
16.	7/20/2011	7/19/2011	2011	Edge	10413840	“I was traveling approximately 30 mph when I heard a very large pop or explosion like sound. After a second or two, I noticed shards of glass falling off the roof over the back

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NHTSA Consumer Complaints Regarding Ford Shattering and Exploding Sunroofs

						window. I pulled over into a lot and found the rear most fixed glass roof panel (of the Panoramic Vista Roof) had completely shattered. . . . The vehicle was brand new, bought only 4 days prior to the incident. . . . and just like in this case it happened spontaneously and without any impact from any object.”
17.	9/20/2011	9/12/2011	2008	F-450 SD	10426509	“The sunroof exploded while driving down the highway. A loud pop was heard and the glass exploded out or upward.”
18.	11/28/2011	11/25/2011	2009	Escape	10437590	“Sunroof exploded while driving down the road. Glass exploded outward and not inward if something hit it.”
19.	4/23/2012	4/23/2012	2008	Escape Hybrid	10456142	“Sunroof exploded from inside to out, sending glass fragments everywhere. It was not hit with anything.”
20.	9/20/12	9/7/2012	2012	Focus	10474369	“While driving home from work, at about 4:00 in the afternoon, the moonroof glass exploded outward.”
21.	11/27/2012	11/20/2012	2010	Escape	10486175	“sunroof glass had exploded. . . the sunroof glass just failed in an outward direction.”
22.	12/14/2012	12/13/2012	2008	Edge	1088851	“I heard a loud pop (like a gunshot) and heard the sound of glass. . . . my sunroof had completely exploded.”
23.	1/11/2013	1/10/2013	2012	Focus	10492283	“while driving at approximately 65 MPH, the sunroof shattered causing glass to fall into vehicle.”
24.	1/25/2013	1/24/2013	2012	Focus	10494677	“I was driving and heard strange noises coming from the roof of the car. . . . hole in the sunroof and shattered glass. . . glass broke in an upward manner. . . .”
25.	2/27/2013	2/25/2013	2008	Escape	10500602	“traveling down an open

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NHTSA Consumer Complaints Regarding Ford Shattering and Exploding Sunroofs

						highway, the sunroof glass. . . exploded for no apparent reason. The glass buckled upward when it broke.”
26.	6/17/2013	6/13/2013	2011	Fusion	10520062	“sunroof exploded. Sounded like a gunshot. Glass did not just spiderweb, pieces of glass, including small shards and slivers fell into backseat. Fortunately the car seats had no kids at the time, as there was glass there.”
27.	6/19/2013	5/29/2013	2013	Explorer	10520728	“My panoramic sunroof exploded!! I was sitting in my vehicle, parked in the driveway and heard a loud noise. . . . It was obvious nothing that nothing hit the glass because I was parked in my driveway and the glass was pushed upward instead of inward.”
28.	7/25/2013	7/25/2013	2012	Edge	10531878	“entire back panel of the panoramic vista sunroof exploded for no reason”
29.	8/12/2013	8/12/2013	2013	Focus	10534981	“while driving 35 mph, the sunroof exploded and separated from the vehicle”
30.	8/20/2013	7/24/2013	2013	Escape	10533289	“I was driving on the highway, no other vehicles around, no overpasses, etc. moonroof exploded over my head. Glass was facing upwards like a volcano. Sounded like a gunshot going off over my head. Ford refused to cover this defect. Car is only 7 months old.”
31.	9/17/2013	9/13/2013	2013	Escape	10544064	“traveling approximately 70 mph, the sunroof shattered.”
32.	9/30/2013	8/15/2103	2012	Focus	10546156	“driving to work. . . and I heard and felt what I thought was a gunshot. However, it wasn’t. The 2012 sunroof exploded.”
33.	10/30/2013	10/21/2013	2013	Edge	10550089	“As I was driving over the high level bridge in Portsmouth, NH, I heard a loud bang. The vehicle

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NHTSA Consumer Complaints Regarding Ford Shattering and Exploding Sunroofs

						had not struck any object, nor had any object struck the vehicle. I looked up and saw that the entire moonroof had completely shattered in place. I immediately pulled off the next exit. When I exited the vehicle and inspected its exterior, I confirmed that there was no indication that anything had hit my car. There was no sign of any object having struck the moon roof.”
34.	11/15/2013	11/15/2013	2011	F-150	10552449	“driving 10 mph, the sunroof exploded. . . the glass exploded upward”
35.	11/30/2013	11/19/2013	2012	Edge	10554184	“heard a loud pop. . . saw that the sunroof over the back seat had exploded”
36.	12/10/2013	12/05/2013	2011	Taurus	10555408	“. . .my moonroof on my 2011 Ford Taurus exploded. It made a very loud noise at first (similar to a gun shot) which was followed by the glass crackling for about 45 minutes. It was not struck by any object (rock, etc).”
37.	1/3/2014	12/21/2013	2014	Escape	10558310	“I was traveling on the hwy at 70 mph and heard what sounded like a shotgun blast. I looked around and heard what ended up being glass falling into my rear seat. My rear panoramic glass had shattered and blown upward in a way I’ve never seen before and I had no idea what caused it, as there were only clothes and a box in the rear seat.”
38.	2/27/2014	2/27/2014	2012	F-150	10566362	“I was driving along with no one very close to me and I heard a loud boom and then some whistling. My sunroof shattered. When I pulled over and checked, it had an upward

						bubble in the middle. Nothing hit the truck. . .”
39.	3/3/2014	2/28/2014	2013	F-150	10566744	“We were driving down the E-470 and hear what sounded like an explosion and realized our sunroof spontaneously exploded from the inside out.”
40.	3/3/2014	2/28/2014	2012	F-150	10566821	“Sunroof shattered while driving down the road. . . Nothing hit the glass, it just shattered out of nowhere. The sound was extremely loud and the glass was pushed outward.”
41.	3/12/2014	3/11/2014	2009	Focus	10568856	“Sunroof shattered. . . Nothing hit it is just made a crashing sound.”
42.	3/16/2014	3/6/2014	2013	Expedition	10572702	“. . . while driving 70 mph in Eastern Arkansas my sunroof exploded. . . sunroof had a huge hole in middle of it. . . remaining glass was bowed up. . it had shattered outward not inward toward the cabin.”
43.	3/19/2014	3/17/2014	2013	F-150	10573590	“Sunroof shattered after exiting my work place parking garage. . . glass particles came inside vehicle compartment. Loud explosion sound and small glass shards got in my eyes, on my skin and everywhere in automobile. The sunroof is basically intact and budged slightly outward or upward.”
44.	5/20/2014	5/20/2014	2014	Explorer	10592880	“Sunroof shattered and rained glass on driver. No impact involved with glass before it shattered.”
45.	6/3/2014	6/1/2014	2014	Explorer	10595844	“Was sitting in my new Ford Explorer 2014 Sport, when heard a loud pop like a gun. . . . Started to drive. . started to hear road noise coming from sunroof. . . retract shade when noticed glass fragments falling. . .”

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NHTSA Consumer Complaints Regarding Ford Shattering and Exploding Sunroofs

46.	6/13/2014	6/12/2014	2014	Lincoln MKT	10598073	"I was driving down the hwy and my friend was driving behind me. My Vista glass moonroof exploded and shattered."
47.	6/30/2014	5/29/2014	2014	Flex	10606988	". . . we heard a shotgun sound come from above our heads and glass flew everywhere in our vehicle, including in the back where our 5-year old daughter was sitting. Our sunroof and literally exploded!!!!. . . all of the glass surrounding the hole (<i>sic</i>) was pointing upwards as if the glass had literally exploded upward."
48.	6/30/2014	6/30/2014	2012	F-150	10607167	". . . after entering the vehicle, the sunroof shattered."
49.	9/22/2014	9/22/2014	2012	Edge	10638244	". . . we heard an explosion from on top of the vehicle. Saw glass pieces sliding off roof. Upon visual inspection we saw the Vista sunroof had exploded . . . no visible sign of impact. Nothing hit the glass."
50.	10/17/2014	10/13/2014	2013	F-150	10648355	"While driving to work on this morning at about 60 mph I heard a loud "boom" sound . . . my sunroof had shattered. The glass panel had a hole in the center and all remaining glass was cracked. . . The remaining glass was protruding upward as if exploded outwardly."
51.	10/31/2014	10/30/2014	2014	Fiesta	10651724	". . . sunroof exploded with very loud gunshot-like noise."
52.	11/17/2014	11/11/2014	2013	F-150	10655345	"I went out to my truck and started it up. I noticed there were tiny specks on the center console. . . sunroof was totally shattered."
53.	11/17/2014	11/10/2014	2013	F-150	10658600	"The sunroof fractured without warning."
54.	12/8/2014	11/30/2014	2010	Lincoln MKT	10662932	"The large tempered glass roof panel of the panoramic 'Vista

						Roof on my 2010 Lincoln MKT shattered without warning with a loud, frightening explosion while driving 65 mph on NY thruway on November 30, 2014. . . . It was amriacle there was not a serious accident, given the volume or traffic at the time.”
55.	12/12/2014	12/11/2014	2014	Escape	10663835	“While driving down the road, a loud pop was heard. My 3 year old pointed to the panoramic sunroof and said look. It had fallen inward on the back onf the glass while the front stayed attached . . . Ford has had recalls on certain VIN numbers but not mine. . . .”
56.	1/12/2015	1/11/2015	2014	Escape	10671793	“My wife and I were driving on a 4 lane highway during the day. We were not operating the panoramic sunroof and the shade was completely open. Suddenly and all at once, the front pane of the glass in the sunroof exploded into cabin. Glass cut my face in two locations and caused bleeding.”
57.	1/29/2015	1/28/2015	2013	F-150	10679801	“Sunroof exploded on highway. No evidence of any outside force.”
58.	2/11/2015	2/9/2015	2013	F-150		“. . . my sunroof exploded send a shower of glass on top of me. It sounded like a shotgun blast went off, I am lucky that I didn’t wreck from the explosion. . . . nothing hit the sunroof, the explosion sent the sunroof up not down. . . .”
59.	2/17/2015	10/02/2014	2012	F-150	10683763	“While driving on the highway, the sunroof suddenly shattered. There was no impact to cause this to happen.”
60.	2/18/2015	2/11/2015	2012	Focus	10684200	“Sunroof exploded while driving.”

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NHTSA Consumer Complaints Regarding Ford Shattering and Exploding Sunroofs

61.	3/30/2015	3/27/2015	2013	Lincoln MKT	10702589	"The contact stated that while driving at 50 mph, a loud abnormal noise emitted from the roof of the vehicle. The contact looked up and noticed that the sunroof exploded."
62.	5/13/2015	5/12/2015	2011	Edge	10716327	"I heard a loud pop & then glass showered down on me. The sunroof spontaneously shattered. . . . A hole was in middle of the sunroof protruding outward. . . ."
63.	5/22/2015	5/19/2015	2015	Lincoln MKX	10721065	"While driving on a hwy near Houston, Texas with no other vehicle around me unexpectedly the rear sunroof glass shattered along the front edge."
64.	6/15/2015	6/6/2015	2015	Explorer	10725274	"While driving 30 mph, the panoramic roof shattered onto the rear seat of the vehicle."
65.	7/20/2015	7/4/2015	2014	Edge	10735283	". . . my sunroof exploded.. .. Glass did fall on my head. . . Ford refuses to cover it under warranty even though dealership states it exploded from the inside."
66.	7/28/2015	7/27/2015	2005	Escape	1074442	"While driving in Livonia, Michigan, my sun visor burst getting glass on me, but more important it burst on the seat where my toddler daughter usually sit."
67.	7/29/2015	10/12/2013	2012	Escape	10744572	"Sunroof/moonroof of our 2012 Ford Escape exploded for no reason. . . . It was obvious the sunroof exploded from the inside out; it looked like a volcano."

68.	8/5/2015	7/31/2015	2012	Focus	10746534	“. . . about an hour before the incident there was a loud popping/banging noise and the sunroof shattered. Glass shards covered the inside of the car, some of them were sharp. When she parked the vehicle the glass was bent out and not down. There was no known impact of any object with the sunroof, it appears to have exploded due to a defect.”
69.	8/9/2015	6/18/2015	2014	Escape	10747296	“This incident involves the panoramic roof glass/window spontaneously bursting at highway speeds.**My family and I were driving at highway speeds when suddenly we heard a very loud explosion. It startled my husband, he almost lost control of the vehicle because the vehicle swerved as a result of having the roof torn open. . . . The shattered pieces of glass chipped/scratched/damaged the roof rack, rear panoramic roof glass (the panoramic roof on this Escape is comprised of two glasses, one in the front that slides opened and closed, and the rear one that remains stationary) and the roof of the vehicle. Absolutely nothing impacted the vehicle to cause this damage.”
70.	8/20/2015	3/6/2015	2015	Escape	10750202	“. . . started the car and my sunroof went back about an inch and shattered glass fell into the car. Check on top of car and the roof popped upward and shattered.”

71.	8/25/2015	8/22/2015	2013	Lincoln MKT	10759218	"The panoramic roofs on the Lincoln MKT blow out for no reason. We have 14 of these MKT's in our fleet we have had close to 10 of the glass roofs shatter. We are very concerned that glass could fall into a drivers eyes as well as our passengers. Also when they do blow out a good size chunk of the roof blows out and anyone behind us could be in grave danger especially anyone on a motorcycle."
72.	10/12/2015	10/9/2015	2011	Lincoln MKZ	10781373	"Sunroof spontaneously shattered while driving on the highway at 55mph."
73.	10/21/2015	10/18/2015	2015	Expedition	10784989	"While sitting there I head a really loud pop. After looking outside and round the vehicle to see what was overhead (nothing), I noticed that the moonroof had shatter and made the back part of the glass bubble upward toward the sky with a small hole and the entire glass shattered."
74.	10/25/2015	10/25/2015	2011	Escape	10785871	"I heard a loud pop while driving down the freeway. The sunroof had shattered and had a large hole in the middle of it. No object hit the car to cause this to happen."
75.	12/28/15	12/26/15	2013	F-350 SD	10816612	"Sunroof exploded sitting still showering everyone with glass, some glass got in occupant face and eyes."
76.	1/6/2016	4/9/2014	2013	F-150	10818459	". . . sunroof exploded as we were driving down the highway."
77.	1/17/2016	1/17/2016	2013	Edge	10820698	"Without warning the Vista roof exploded and shattered"

Exhibit 1, Page 12

NHTSA Consumer Complaints Regarding Ford Shattering and Exploding Sunroofs

						glass into the interior of the vehicle. There was no external force such as a projectile that caused the damage.”
78.	2/22/2016	2/18/2016	2016	Edge	10837490	“... I heard a loud explosion, I did not feel any impact on the automobile but began to hear rattling on the top of the roof. When I pulled over, I saw that the sunroof had shattered and exploded. ... No object hit the sunroof, it just exploded.”
79.	2/23/2016	2/12/2016	2007	Expedition	10837654	“I was riding along the interstate when my sunroof suddenly exploded! Nothing hit it. ... Shattered glass was all over the interior of my vehicle.”
80.	3/2/2016	2/28/2016	2015	Lincoln MKT	10839553	“While driving 65 mph, a loud abnormal sound was heard coming from the panoramic sun roof. The vehicle was taken to a dealer where it was diagnosed that the sun roof fractured and needed to be replaced.”
81.	4/17/2016	4/16/2016	2013	Edge	10859965	“Vehicle was enroute on northbound I-95 in Lorton on a Satudya when we heard a loud bang. ... Turns out the sunroof was shattered in the front and back.”
82.	5/8/2016	5/8/2016	2012	Edge	10863812	“Driving down the divided highway at about 65 mph, with no vehicles in front/next to/or behind me, the panoramic sunroof exploded and shattered. This was not due to any impact or collision of any type, to include debris, flying pebbles, etc. The sunroof exploded outwards, with the glass pushed upwards”
83.	5/25/2016	5/20/2016	2016	Explorer	10870814	“The rear sunroof exploded, I was driving down Tollway 99 out side of Houston Texas at about 60 mph. ... And a very

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NHTSA Consumer Complaints Regarding Ford Shattering and Exploding Sunroofs

						loud noise, like a gun shot 'blew out' the rear glass. . ."
84.	6/23/2016	6/23/2016	2012	Focus	10876307	"Sunroof exploded. Just driving along a city street at approx. 45 mph and a loud bang sounded."
85.	7/18/2016	7/18/2016	2015	Lincoln MKT	10885727	"While driving on the parkway, a loud explosion noise occurred; glass from the sunroof came into the vehicle. No vehicles were in front of me. The front portion of the sunroof had a gaping hole. A police report was filed there was not evidence of a rock or bullet as the reason for the incident."
86.	7/22/16	7/10/2016	2010	Fusion Hybrid	10887661	"My sunroof exploded outwards while I was driving on the highway."
87.	8/14/2016	8/13/2016	2015	Focus	10895720	"The sunroof exploded, nothing hit it and there were no other vehicles nearby."
88.	10/7/2016	9/29/2016	2009	Flex	10914814	"I was driving down the interstate and my sunroof exploded. There wasn't anyone in front of me so a rock or something could not have been kicked up and nothing could have blown off a vehicle and hit me. The sunroof just exploded for no apparent reason."
89.	10/10/2016	10/8/2016	2012	Focus	10915117	"While driving at 40mph, weather clear 80 degrees, my sunroof exploded/shattered. I checked to see if it had been hit by a rock or object and none were seen."
90.	10/19/2016	10/19/2016	2014	F-150	10917427	"Was driving on C-470 when I heard a loud gunshot nose. . . . Heard a crackling sound from sunroof. . . Got home looked at the sunroof from the roof at eye line and noticed bulge coming from inside vehicle, like too

						much pressure built up inside the truck and exploded through the sunroof.”
91.	11/22/2016	11/18/2016	2012	F-150	10927536	“Sunroof imploded while parked.”
92.	12/13/2016	12/10/2016	2016	Lincoln Navigator	10934922	“... sunroof spontaneously exploded. There were no vehicles near me and there was nothing overhead. We found no rocks in the vehicle and from the attached pictures it is clear that the glass broke in an upward fashion.”
93.	12/19/2016	12/18/2016	2008	Escape	10936364	“While driving down the highway, it sounded like a huge pop or like a gun shot sound and when we stopped, we found that the sunroof had ‘exploded’. There was nothing that hit our car.”
94.	12/26/2016	12/26/2016	2014	Explorer	10937505	“My husband and I were driving onto highway, going less than 50 mph, when we heard a very loud explosion that rattled our head and made our ears ring. There wasn’t anything that hit us or that had fell on sunroof at all so we were both in shock as to what happened. We both looked up to see that our front sun roof had exploded and in a quick panick we tried to shut the sunroof to keep the glass from falling on us but were not able to close it in enough time and glass fell all over us and flew into the back hitting our kids. . . I’m worried for the safety of my kids because we have a bigger sun roof behind this small one that is right above their seats and I’m sure it could explode next. I had to place a blanket above their heads to

						keep the glass that was still attached from crumbling and falling on them and in their eyes during the rest of the way back home. The glass was crumbling like cookie crumbs and it was not safe for them in the back at all.”
95.	1/9/2017	12/3/2017	2016	F-250	10943831	“... the sunroof spontaneously shattered, blowing a huge hole through it. It sounded like a bullet had gone off. There were no rocks or shell casings found in the vehicle.”
96.	1/9/2010	1/1/2017	2014	Explorer	10943940	“The moonroof over the back seat popped out and spiderwebbed when the front passenger door closed. Some glass fell into the backseat. Vehicle was parked and off.”
97.	2/6/2017	2/6/2017	2013	Edge	10949861	“Driving on interstate highway at 70 miles per hour on straight level and smooth section when a sudden loud explosion occurred, and glass could be heard falling. Driver stopped to assess damage. Glass had shattered around the perimeter portion of the panoramic sunroof. There was no flying road debris at the time of the incident. There was no apparent evidence of impact. This appears to be either a problem with the manufacturing of the glass or the way in which it is attached to the vehicle.”
98.	2/9/2017	2/8/2017	2016	Focus	10950436	“All of a sudden I hear a loud pop. It sounded like I had a blow out and then I hear glass so I pulled over safely only to get out and see that my sunroof was busted. ... It was a very scary moment. It sounded like pressure was built up when it

						busted. The glass was pointed upwards like it busted from inside out.”
99.	2/16/2017	2/8/2017	2013	Escape	10955184	<p>“As I was making it into Tacoma, I suddenly heard a huge boom, like an explosion or shot gun sound which made me panic. Then all of a sudden I was covered in glass. I looked around trying to figure out what happened while still on the highway travelling 555 mph. There on ramp and off ramp near by so cars are passing me; making it difficult to exit. I was terrified of getting hit. I looked up and saw it was the sunroof missing a whole bunch of class. So my first instinct was closing the cover to protect my daughter in the back seat. The moment I got it closed, more glass flew down and hit the cover. I sighed in relief. Eventually I got off the highway and parked. I instantly ran back to my daughter (8 months old) to see is she was ok and she only had a tiny scratch. I had a bunch of scratches all over my hands.”</p>

EXHIBIT 2

**NHTSA's LETTER TO FORD DATED JULY 25, 2015 –OPENING FORD
INTO INVESTIGATION EA 14-002**



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

JUL 25 2014

1200 New Jersey Avenue SE.
Washington, DC 20590

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Steven Kenner, Global Director
Automotive Safety Office
Environmental and Safety Compliance
Ford Motor Company
330 Town Center Drive, Suite 400
Dearborn, MI 48126

NVS-212eer
EA14-002

Dear Mr. Kenner:

The Office of Defects Investigation (ODI) is conducting an investigation (EA14-002) of spontaneous sunroof shattering, resulting in potential driver distraction (while in motion) and injuries from falling glass fragments in model year (MY) 2011-2013 Kia Sorento vehicles. For a comparative assessment, we are requesting information concerning certain Ford vehicles equipped with a glass "panoramic" type sunroof system.

Unless otherwise stated in the text, the following definitions apply to these information requests:

- **Subject peer vehicles:** all MY 2011-2014 Ford Explorer, Edge and Escape vehicles equipped with a panoramic sunroof system, manufactured for sale or lease in the United States, including, but not limited to, the District of Columbia, and current U.S. territories and possessions.
- **Panoramic sunroof system:** a glass panel having single or multiple fixed glass panels and/or single or multiple moveable glass panels that can tilt upward and slide back over the existing roof structure. If a retractable front wind deflector is also made of glass and part of the sunroof surface, it shall be included.
- **Subject condition:** allegation of glass breakage of the panoramic glass roof that occurs either while the vehicle is parked or being driven.
- **Ford:** Ford Motor Company, all of its past and present officers and employees, whether assigned to its principal offices or any of their field or other locations, including all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of its headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Ford (including all business units and persons previously referred to), who are or, in or after 2004, were



involved in any way with any of the following related to the alleged defect in the subject vehicles:

- a. Design, engineering, analysis, modification or production (e.g. quality control);
 - b. Testing, assessment or evaluation;
 - c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, or lawsuits; or
 - d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers.
- **Document:** "Document(s)" is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by Ford, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, "document(s)" also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by Ford or not. If a document is not in the English language, provide both the original document and an English translation of the document.

- **Other Terms:** To the extent that they are used in these information requests, the terms “claim,” “consumer complaint,” “dealer field report,” “field report,” “fire,” “fleet,” “good will,” “make,” “model,” “model year,” “notice,” “property damage,” “property damage claim,” “rollover,” “type,” “warranty,” “warranty adjustment,” and “warranty claim,” whether used in singular or in plural form, have the same meaning as found in 49 CFR 579.4.

In order for my staff to evaluate the alleged defect, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. Insofar as Ford has previously provided a document to ODI, Ford may produce it again or identify the document, the document submission to ODI in which it was included and the precise location in that submission where the document is located. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the organization of this information request letter (including all individual requests and subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation.

Please repeat the applicable request verbatim above each response. After Ford’s response to each request, identify the source of the information and indicate the last date the information was gathered.

1. State, by model and model year, the number of subject peer vehicles Ford has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Ford, state the following:
 - a. Vehicle identification number (VIN);
 - b. Make;
 - c. Model;
 - d. Model Year;
 - e. Date of manufacture;
 - f. Date warranty coverage commenced; and
 - g. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

Provide the table in Microsoft Access 2010, or a compatible format, entitled “PRODUCTION DATA.”

2. State the number of each of the following, received by Ford, or of which Ford is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:
 - a. Consumer complaints, including those from fleet operators;
 - b. Field reports, including dealer field reports;
 - c. Reports involving a crash, injury or fatality;
 - d. Property damage claims; and
 - e. Third-party arbitration proceedings where Ford is or was a party to the arbitration; and
 - f. Lawsuits, both pending and closed, in which Ford is or was a defendant or codefendant.

For subparts “a” through “f,” state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

In addition, for items “c” through “f,” provide a summary description of the alleged problem and causal and contributing factors and Ford’s assessment of the problem, with a summary of the significant underlying facts and evidence. For items “e” and “f,” identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:
 - a. Ford’s file number or other identifier used;
 - b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
 - c. Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
 - d. Vehicle’s VIN;
 - e. Vehicle’s make, model and model year;
 - f. Vehicle’s mileage at time of incident;
 - g. Incident date;
 - h. Report or claim date;
 - i. Whether the vehicle was occupied when the incident occurred;
 - j. Whether the vehicle was in motion when the incident occurred;
 - k. Whether a crash is alleged;
 - l. Whether property damage is alleged;
 - m. Number of alleged injuries, if any; and
 - n. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2010, or a compatible format, entitled “REQUEST NUMBER TWO DATA.”

4. Produce copies of all documents related to each item within the scope of Request No. 2 that alleges a crash, injury, or fatality occurred. (Also include all documents related to any incident in which Ford conducted a field assessment of the incident vehicle, including all photographs.) Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Ford used for organizing the documents. Describe in detail the search methods and search criteria used by Ford to identify the items in response to Request No. 2.
5. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Ford to date that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and

warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

Separately, for each such claim, state the following information:

- a. Ford's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. VIN;
- d. Repair date;
- e. Vehicle mileage at time of repair;
- f. Repairing dealer's or facility's name and state;
- g. Labor operation number;
- h. Problem code;
- i. Replacement part number(s) and description(s);
- j. Whether the vehicle was occupied when the incident occurred;
- k. Whether the vehicle was in motion when the incident occurred;
- l. Concern stated by customer; and
- m. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "WARRANTY DATA."

6. Describe in detail the search methods and search criteria used by Ford to identify the claims in response to Request No. 5, including the labor operations, problem codes, part numbers and any other pertinent parameters used.
7. For each model, model year and panoramic sunroof system design manufactured on the subject peer vehicles, identify the part number, supplier name and a complete street address, contact name, and telephone number.
8. For each panoramic sunroof system utilized in the subject peer vehicles, provide the following information:
 - a. Marketing or Common item name;
 - b. Movable or Fixed glass panel system;
 - c. Single or multiple panel design (state no. of panels);
 - d. Type of movable glass panel deployment design (i.e., Slide-in-Roof; Tilted and Slide over roof; Titled, Slide and Stacked (for sectioned design), etc.);
 - e. Sunshade type (manual or automatic, 1 or 2-piece)
 - f. Location of glass panel(s) (i.e., "over 1st-row occupants", "over 2nd- row occupants", etc.);
 - g. Size of panel(s) (length x width in centimeters);
 - h. Thickness of glass panel(s) (millimeters);
 - i. Weight of glass panel(s) (kilograms);
 - j. Type of glass used as classified in ANSI/SAE Z26.1 (i.e. laminated, tempered, tempered-laminated, etc.);
 - k. Certified to ANSI/SAE Z26.1, Item 3/4 Glazing Material Standard (specify all applicable Table 1 Tests);

- l. Provide any impact test results per ANSI/SAE Z26.1 Test No. 6-14 or per other standards if available;
- m. ANSI/SAE Z26.1 certification marking (i.e. AS1, AS2, etc.) if any;
- n. Explain the reasons for selecting the type, thickness and other relevant aspects of the glass used in the subject component in comparison with other types, thickness, and other relevant aspects of glass, which were considered or which could have been used;
- o. Engineering drawings of the panoramic sunroof system, including a depiction and/or description of how it is assembled in the subject vehicle.

Legal Authority for This Request

This letter is being sent to Ford pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports and the production of things. It constitutes a new request for information.

Civil Penalties

Ford's failure to respond promptly and fully to this letter could subject Ford to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) The Vehicle Safety Act, as amended, 49 U.S.C. § 30165(a)(3), provides for civil penalties of up to \$7,000 per violation per day, with a maximum of \$35,000,000 for a related series of daily violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. This includes failing to respond completely, accurately, and in a timely manner to ODI information requests. The maximum civil penalty of \$7,000 per violation per day is established by 49 CFR 578.6(a)(3). The maximum civil penalty of \$35,000,000 for a related series of daily violations of 49 U.S.C. § 30166 is authorized by 49 U.S.C. § 30165(a)(3) as amended by § 31203(a)(1)(B) of the Moving Ahead for Progress in the 21st Century Act, Public Law 112-141.

If Ford cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege, Ford does not submit one or more requested documents or items of information in response to this information request, Ford must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

Confidential Business Information

All business confidential information must be submitted directly to the Office of Chief Counsel as described in the following paragraph and should not be sent to this office. In addition, do not submit any business confidential information in the body of the letter submitted to this office. Please refer to EA14-002 in Ford's response to this letter and in any confidentiality request submitted to the Office of Chief Counsel.

If Ford claims that any of the information or documents provided in response to this information request constitute confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or are protected from disclosure pursuant to 18 U.S.C. § 1905, Ford must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 CFR Part 512, as amended, to the Office of Chief Counsel (NCC-111), National Highway Traffic Safety Administration, Room W41-227, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590. Ford is required to **submit two copies of the documents containing allegedly confidential information (except only one copy of blueprints) and one copy of the documents from which information claimed to be confidential has been deleted.** Please remember that the phrase "ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION" or "CONTAINS CONFIDENTIAL BUSINESS INFORMATION" (as appropriate) must appear at the top of each page containing information claimed to be confidential, and the information must be clearly identified in accordance with 49 CFR 512.6. If you submit a request for confidentiality for all or part of your response to this IR, that is in an electronic format (e.g., CD-ROM), your request and associated submission must conform to the new requirements in NHTSA's Confidential Business Information Rule regarding submissions in electronic formats. See 49 CFR 512.6(c) (as amended by 72 Fed. Reg. 59434 (October 19, 2007)).

If you have any questions regarding submission of a request for confidential treatment, contact Otto Matheke, Senior Attorney, Office of Chief Counsel at otto.matheke@dot.gov or (202) 366-5253.

Due Date

Ford's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by August 22, 2014. Ford's response must include all non-confidential attachments and a redacted version of all documents that contain confidential information. If Ford finds that it is unable to provide all of the information requested within the time allotted, Ford must request an extension from me at (202) 366-0139 no later than five business days before the response due date. If Ford is unable to provide all of the information requested by the original deadline, it must submit a partial response by the original deadline with whatever information Ford then has available, even if an extension has been granted.

Please send email notification to Emily Reichard at emily.reichard@dot.gov and to ODI_IRresponse@dot.gov when Ford sends its response to this office and indicate whether there is confidential information as part of Ford's response.

If you have any technical questions concerning this matter, please call Emily Reichard of my staff at (202) 366-4925.

Sincerely,

 7/24/14

Scott Yon, Chief
Vehicle Integrity Division
Office of Defects Investigation

EXHIBIT 3

**NHTSA'S EXPANDED ORDER DIRECTED TO FORD AND OTHER
MANUFACTURERS DATED APRIL 14, 2016**

**UNITED STATES DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION**

1200 New Jersey Avenue, SE
West Building, W41-326
Washington, DC 20590

In re:

EA14-002
Kia Sorento Sunroofs

**GENERAL ORDER DIRECTED TO
MOTOR VEHICLE MANUFACTURERS**

To:

John Turley
Senior Manager, Product Regulatory Office
American Honda Motor Co.
1919 Torrance Blvd.
Torrance, CA 90501

Sam Campbell
Department Head-Safety Engineering
BMW of North America, LLC
P.O. Box 1227
Westwood, NJ 07677

Stephen L. Williams
Head of Vehicle Safety Compliance and
Product Analysis
FCA US LLC
800 Chrysler Drive
Auburn Hills, MI 48326

Todd Fronckowiak
Global Automotive Safety Compliance Office
Ford Motor Company
Fairlane Plaza South, Suite 500
330 Town Center Drive
Dearborn, MI 48126-2738

Brian Latouf
Director, Field Product Investigations and
Evaluations
General Motors LLC
30001 Van Dyke – Mail Code 480-210-2V
Warren, MI 48090-9055

Steve Johnson
Director, Engineering and Design Analysis
Hyundai Motor America
10550 Talbert Avenue
Fountain Valley, CA 92708

J.S. (Jurassic) Park
Executive Director/Production Litigation &
Regulatory Compliance
Kia Motors America
111 Peters Canyon Road
Irvine, CA 92606

David Robertson
Group Manager, Environmental, Safety and
Powertrain Engineering
Mazda North American Operations
1025 Connecticut Avenue NW
Washington, DC 20036

(Service List Continues on Next Page)

David Tait
General Manager, Engineering Services
Mercedes-Benz US, LLC
One Mercedes Drive, P.O. Box 350
Montvale, NJ 07645-0350

Tara Underwood
Manager, Technical Compliance
Nissan North America, Inc.
One Nissan Way
Franklin, TN 37067

Matthew D. Collins
Manager
Toyota Motor Engineering & Manufacturing
Mail Code: S-104
19001 South Western Avenue
Torrance, CA 90501

Chris Sandvig
General Manager of Compliance/TREAD
Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326

Adam Kopstein
Manager, North American Product Safety &
Compliance
Volvo Cars of N.A., LLC
1 Volvo Drive, Building B
Rockleigh, NJ 07647

This General Order is issued by the Secretary of Transportation pursuant to 49 U.S.C. § 30166(g)(1)(A) and 49 C.F.R. § 510.7, and pursuant to a delegation of authority to the Chief Counsel of the National Highway Traffic Safety Administration ("NHTSA"), an Operating Administration of the United States Department of Transportation, 49 C.F.R. §§ 1.95, 501.8(d)(3).

As part of NHTSA Investigation No. EA14-002, NHTSA's ongoing investigation into allegations of optional sunroofs shattering unexpectedly and the agency's evaluation of the scope, frequency, and consequences of such incidents, NHTSA, by this General Order, hereby demands that the aforementioned motor vehicle manufacturers file certain reports concerning unexpected sunroof shatter incidents.

Your response to this General Order shall be provided by **May 16, 2016**.

DEFINITIONS

To the extent used in this General Order, the following definitions apply:

1. The definitions of **“manufacturer,” “motor vehicle,” “original equipment,”** and **“replacement equipment”** can be found in 49 U.S.C. § 30102, 49 C.F.R. § 579.4, and 49 C.F.R. § 573.4.
2. **“Panoramic sunroof”** means a glass panel with a combined surface area of greater than 0.5 m² and having a single or multiple fixed glass panels and/or a single or multiple moveable glass panels that can tilt upward and slide back over the existing roof structure. If a retractable front wind deflector is also made of glass and part of the sunroof surface, it shall be included.
3. **“Sunroof”** means a fixed or operable opening in a motor vehicle roof that allows light and/or fresh air to enter the passenger compartment.
4. A panoramic sunroof that **“spontaneously shatters”** means an incident (or alleged incident) occurring in the field, whether in the United States or abroad, by which some mechanism unexpectedly causes the sunroof to crack or break into pieces.
5. **You” or “Your”** means each individual party to whom this General Order is directed. This definition includes all of your past and present officers and employees, whether assigned to your principal office(s) or any of your field or other locations, including all of your divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (*e.g.*, employee of a consultant) by or under your control (including all business units and persons previously referred to).

INSTRUCTIONS

1. Your response to the General Order shall be provided by electronic mail to NHTSA's Office of Defects Investigation, Chief of the Vehicle Integrity Division (currently Scott Yon, Scott.Yon@dot.gov), with a copy to Michael Lee (Michael.Lee@dot.gov), and NHTSA's Assistant Chief Counsel for Litigation and Enforcement (currently Timothy H. Goodman, Tim.Goodman@dot.gov), with a copy to Beth Mykytiuk (Elizabeth.Mykytiuk@dot.gov). NHTSA will provide notice if the individuals holding these positions or their e-mail addresses change.
2. You are required to respond to every request listed in this General Order, including subparts. If you cannot respond to any specific request or subpart(s) thereof, please state the reason why you are unable to do so. Examples include, but are not limited to, situations where you do not possess the information requested at the time the report is due or where you are required to redact the information because it is protected from disclosure under foreign privacy law. If you do not possess the information necessary to fully complete a report required by this General Order on or before its due date, you must provide as much information as you have available at the time the report is due.
3. The requests in this General Order are deemed to be continuing in nature so as to require additional and/or amended reports from you should you obtain or become aware of any new, additional, or differing responsive information about any previously-reported incident.
4. Failure to respond fully or truthfully to this General Order may result in a referral to the United States Department of Justice for a civil action to compel responses, and may subject a manufacturer to civil penalties of up to \$21,000 per day, up to a maximum penalty of

\$105,000,000 for a related series of daily violations. 49 U.S.C. §§ 30163(a)(1), 30165(a)(3); 49 C.F.R. § 578.6(a)(3).¹

5. You are cautioned not to assert privilege in connection with any information you submit to NHTSA. Should you anticipate doing so for any reason (and the agency can contemplate none), you are instructed to contact Beth Mykytiuk at (202) 366-9991 to discuss why any information you submit would constitute privileged information.

6. If you claim that any of the information or documents provided in response to this General Order constitutes confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or is protected from disclosure pursuant to 18 U.S.C. § 1905, then you must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 C.F.R. Part 512, to the Office of Chief Counsel (NCC-111), National Highway Traffic Safety Administration, West Building, W41-326, 1200 New Jersey Avenue, SE, Washington, DC 20590. A copy of your request for confidential treatment and accompanying materials shall be sent by electronic mail to Beth Mykytiuk at Elizabeth.Mykytiuk@dot.gov.

7. As used herein, the singular includes the plural; the plural includes the singular. The masculine gender includes the feminine and neuter genders; and the neuter gender includes the masculine and feminine genders. "And" as well as "or" shall be construed either disjunctively or conjunctively, to bring within the scope of this General Order all responses that might otherwise be construed to be outside its scope. "Each" shall be construed to include "every" and "every" shall be construed to include "each." "Any" shall be construed to include "all" and "all" shall be construed to include "any." The use of a verb in any tense shall be

¹ Effective March 17, 2016, the daily civil penalty was increased from \$7,000 to \$21,000, and the maximum civil penalty was increased from \$35 million to \$105 million. See Fixing America's Surface Transportation Act (the "FAST Act"), Pub. L. 114-21, § 24110(a)(2), 129 Stat. 1312 (Dec. 4, 2015).

construed as the use of the verb in a past or present tense, whenever necessary to bring within the scope of the requests all responses which might otherwise be construed to be outside its scope.

8. NHTSA reserves the right to request additional information regarding any incident reported in connection with this General Order.

9. You are only required to provide information for motor vehicles manufactured by you as model years 2006 through 2016.

10. You are not required to submit the requested report under oath.

Requests

1. Describe the history of panoramic sunroofs in the vehicles you manufacture. Your response should include, but not be limited to, the reason(s) you decided to add panoramic sunroofs as an option, the model(s) and model year for which you first offered this option, and the timeline of the development and decision-making that led to the introduction of panoramic sunroofs.

2. Identify and enumerate the total population of vehicles you manufactured that contain a panoramic sunroof as original equipment. Your response should be broken down by make, model, and model year.

3. For each panoramic sunroof identified in your Response to Request No. 2, provide the following information: (i) the name and contact information for the sunroof manufacturer; (ii) the number of glass panels; (iii) the size of the glass panel(s) (length x width in centimeters); (iv) the thickness of the glass panel(s) (millimeters); and (v) the standard to which the sunroof was manufactured. Your response should include an explanation of any changes made between models and model years.

4. Identify, by make, model, and model year, the number of incidents involving an allegation that a panoramic sunroof has spontaneously shattered, and state the number of injuries

or fatalities associated with such incidents.

5. File a report of every incident involving an allegation that a panoramic sunroof has shattered spontaneously in a vehicle manufactured by you, of which you are aware by any means (including but not limited to consumer complaints, lawsuits, and media reports). The report shall include the following information: (i) the date on which you were first notified or learned of the incident; (ii) the name of the individual involved in the incident; (iii) the contact information for counsel representing that individual (if applicable); (iv) the make, model, and model year of the vehicle; (v) the vehicle identification number (VIN); (vi) the date, location, and description of the incident (including whether the vehicle was stationary or in motion when the incident occurred); (vii) the number and description of any injuries or fatalities; (viii) a summary of your current understanding as to the nature of the incident and/or the cause of the breakage (including whether a rock or other item of road debris was found); and (ix) a summary of any other information relevant to your investigation of the incident. Your report should be in the format attached as Exhibit A.

Dated: April 14, 2016

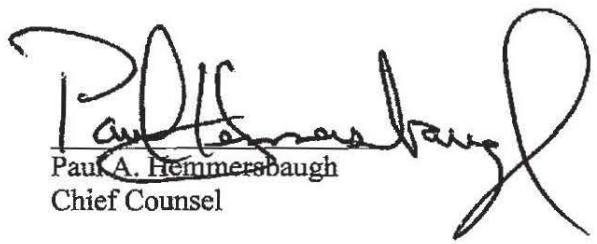

Paul A. Hemmersbaugh
Chief Counsel

EXHIBIT 4

VEHICLE SAFETY: FORD'S SUSTAINABILITY REPORT 2015/2016:
FORD MOTOR COMPANY

(<http://corporate.ford.com/microsites/sustainability-report-2015-16/products-safety.html>; accessed on March 2, 2017)



PRODUCTS

Vehicle Safety

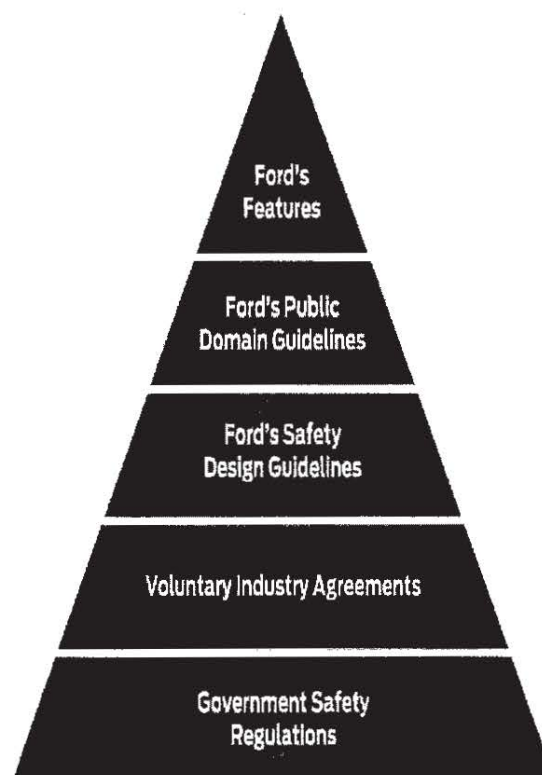
Quality is critical to the safety of our customers and, therefore, to our responsibilities and success as a company. We are trusted to design and manufacture vehicles that achieve high levels of safety over a wide range of real-world conditions.

Our Approach

Safety is a fundamental aspect of quality. The foundation of our corporate safety policy, Policy Letter 7, states Ford's commitment to design and build vehicles that meet or exceed applicable laws and regulations, and to advance safety wherever practicable.

Our Quality Operating System continues to deliver high-quality, safe and secure vehicles. This process includes real-world safety data, driver behavior considerations, road infrastructure and environmental factors, regulatory safety requirements and voluntary industry agreements.

We conduct engineering analyses, computer simulations and crash testing to evaluate the performance of vehicles and components, using state-of-the-art crash-test facilities in Dearborn, Michigan; Merkenich, Germany; and Dunton, England. In Dearborn, we also have a motion-based driving simulator, called VIRTTEX (VIRtual Test Track



EXperiment), that we use to help us research advanced driver assist features, human-machine interface (HMI) concepts, and other driving-related human factors topics such as drowsy driving and distracted driving.

As well as meeting or exceeding regulatory requirements, our processes, tools and facilities confirm that our vehicles align with our own stringent internal guidelines:

- **Safety Design Guidelines:** Our stringent internal engineering design guidelines exceed regulatory requirements and define additional real-world requirements that are not regulated
- **Public Domain Guidelines:** Ford-specified levels of performance for significant public domain tests, which are designed to protect and strengthen our brands

We regularly re-evaluate and update these internal guidelines as appropriate.

Public Domain Ratings

Public domain rating programs vary around the world, each having unique testing protocols and evaluation criteria. Among other consumer advocacy groups, organizations such as New Car Assessment Programs (NCAPs) and insurance-sponsored organizations that rate vehicles for safety exist globally.

Global Safety Public Domain Organizations

Due to the disparity of, and ongoing changes to, NCAPs around the world, it is increasingly more difficult to achieve the highest ratings, and a vehicle may achieve the highest rating in one region or program, but not in another. These inconsistencies pose additional challenges for global automotive

companies like Ford, and may even require us to implement unique vehicle designs in different markets.

The NCAPs around the world, which have traditionally included vehicle crashworthiness ratings, are increasingly including pedestrian protection assessments and crash avoidance technology evaluations.



What We're Doing



Safety Technologies

The innovative driver assist technologies we are implementing today are making vehicles safer and more convenient.

Read more (products-safety-technologies.html)



Encouraging Safer Driving

Through training programs and new technology, we're helping to make novice and experienced drivers safer, as well as protect passengers, pedestrians and other road users.

Read more (products-safety-safer.html)

More to explore:

Governmental Standards – Vehicle Safety (Annual Report, pages 10–11)
(doc/sr15-form-10-k.pdf#page=14) (pdf, 8.3MB)

MORE TO EXPLORE:

Elsewhere in Products and Customers:

- DATA: Vehicle Safety (products-data-safety.html)

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Go Further Sustainability Report 2015/16

PRODUCTS

Safety Technologies

Sixty years ago, we became the first automaker to offer factory-installed safety belts, and our legacy of safety innovation endures to this day. We continue to roll out a range of technologies designed to enhance vehicle safety and help customers drive more safely.

We continue to implement innovations that enhance vehicle safety. We are also working on vehicles that communicate with each other and with the world around them, and share learnings with colleagues who are working toward our vision of an integrated transportation ecosystem. (mobility-smartmobility.html)

Ford views automotive safety holistically, and actively works this approach into all areas of our business, from vehicle design and manufacturing to operator behavior and the motor vehicle environment. As well as technologies designed to enhance the safety of our vehicles, we also seek to improve driver safety education through initiatives such as our Ford Driving Skills for Life program (products-safety-safer.html).

The Ford F-150 is an Insurance Institute for Highway Safety's Top Safety Pick (<https://media.ford.com/content/f-150-supercrew-supercab-earn-2016-iihs-top-safety-pick.html>) for SuperCrew and SuperCab configurations – the only large pickup to earn this recognition.

Vehicle Safety Highlights

Once again, in 2015, we received high marks and accolades for vehicle safety in a number of the industry's key third-party crash-testing programs. Our highlights include:

- For the 2016 model year, 16 Ford Motor Company vehicles earned the highest possible Overall Vehicle Score of five stars in the **New Car Assessment Program (NCAP)** for the U.S. National Highway Traffic Safety Administration (NHTSA). These five-star vehicles are the Ford Edge, Explorer, Expedition, F-150, Focus, Fusion, Fusion Energi, Mustang Coupe, Navigator, Taurus and Transit Connect, and the Lincoln MKS, MKT and MKX
- Twelve Ford vehicles now hold a maximum five-star **Euro NCAP** safety rating, two more than the next best manufacturer. These vehicles are the Ford B-MAX, C-MAX, Fiesta, Focus, Galaxy, Grand C-MAX, Kuga, Mondeo, Tourneo Connect, Transit Tourneo, Ranger and S-MAX
- Ford has an industry-leading total of seven **Euro NCAP Advanced Rewards**, for our Active City Stop, Driver Alert technologies, Emergency Assistance, Forward Alert, Lane-Keeping Alert, Lane-Keeping Aid and MyKey technologies

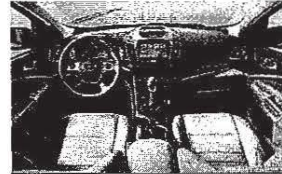
We have developed a wide range of technologies, and continue to support research in many areas, including:



Driver Assist and Collision Avoidance
(products-safety-technologies-avoidance.html)



Occupant Protection
(products-safety-technologies-protection.html)



Post-Crash Response
(products-safety-technologies-postcrash.html)